S/M No : TCN400FNF0

Service Manual
Color Television

CHSSIS	MODEL
CN-400FN	**DTQ-29U1SCV** **DTQ-29U1SSFV** **DTQ-29U1SCSV** **DTQ-29U5SSFV**
CN-401FN	**DTQ-29U4SCV**

Caution
: In this Manual, some parts can be changed for improving. their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center.

DAEWOO ELECTRONICS

JUNE. 2005

TABLE OF CONTENTS

SAFETY PRECAUTIONS 2
SPECIFICATIONS 5
CIRCUIT BLOCK DIAGRAM 6
ALIGNMENT INSTRUCTIONS 7
- YOUR REMOTE CONTROL 7
- SERVICE MODE ADJUSTMENT 8
- ASSEMBLY ADJUSTMENT 10

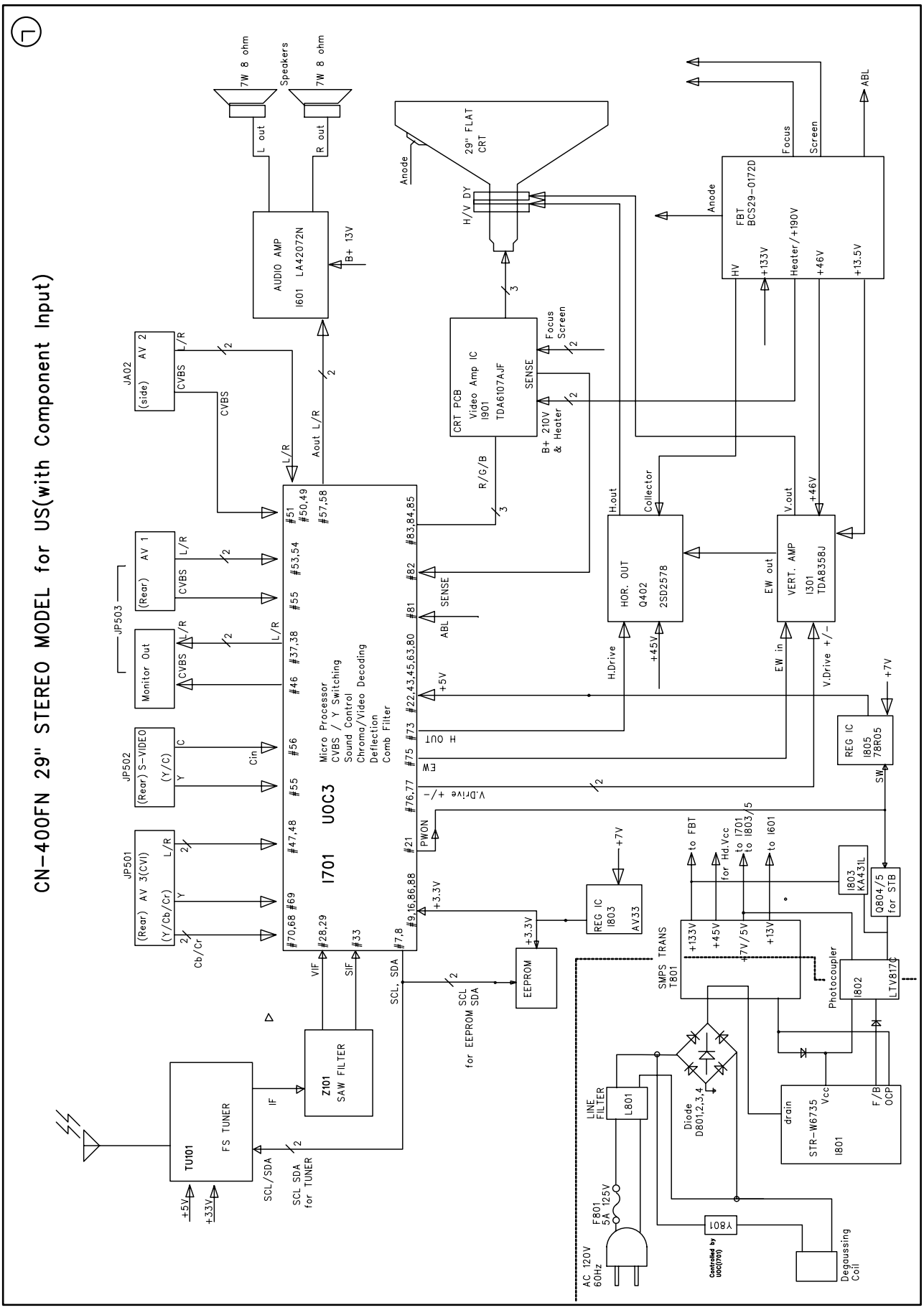
APPENDIX(Appendix is provide only by internet[http://svc.dwe.co.kr])

IC DESCRIPTION 14
- UOC III SERIES 14
- TDA8358J VERTICAL AMPLIFIER 19
- TDA6107AJF 21
- 24WC16-16 KB EEPROM 22
- LA42072N-E AUDIO AMPLIFIER 23
- STR-W6735/56 24

WAVEFORMS 33
TROUBLE SHOOTING GUIDE 35
- NO POWER 35
- NO PICTURE 36
- NO SOUND 37
- CH DON'T MEMORY or SKIP 38
- NO COLOR 39
- NO VERTICAL DEFLECTION 39
- REMOTE CONTROL DOESNOT OPERATE 40

ELECTRICAL PARTS LIST 41
DIFFERENT PARTS LIST 53
PRINTED CIRCUIT BOARD 56
SCHEMATIC DIAGRAM 59
EXPLODE VIEW 61

CIRCUIT BLOCK DIAGRAM



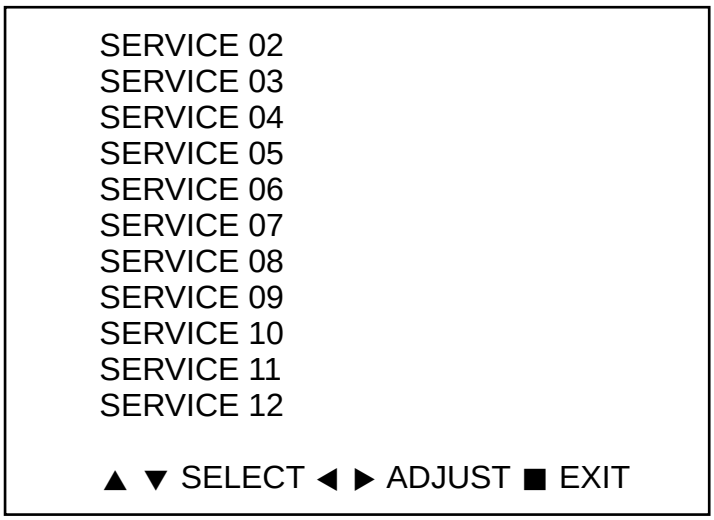
ALIGNMENT INSTRUCTION

1. SERVICE MODE ADJUSTMENTS

Follow the steps below whenever service adjustment is required.
See Table- A and Table- B to determine if service adjustments are required.

1) How to enter the service mode using the user remote control.

- Turn the set on.
- Direct the remote control to the reception window of TV.
- Push buttons of remote control in sequence as follows.
  1 → MUTE → DISPLAY → MUTE
- Then, the screen will appear as follows.



- Using the channel up or channel down button, select the item you wish to adjust. (The color of selected item turns into the blue.)
- Press the volume up or down button to enter in the service mode you wish to adjust.

2) How to memorize the adjusted values in the service mode.

- Don't have to press any button the state which the screen is displaying each of service menus after all adjustments are completed each of all service menu.

Table-A : Adjust the values of service mode when a part is replaced.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
I701 (U-COM)		O	Data is stored in I702.
I702 (EEPROM)	O		Initial setting values are written from I701. ADJUSTING ITEMS S6 : Geometry adjustmrnt S8 : White balance S9 : Subbrightness
CRT	O		Adjust items related to picture tube only. (White Balance adjustment) CRT OPTION (Screen Option adjustment)

Table-B. CN-400FN(DTQ-29U1SCV) EEPROM DATA

MODE	NAME	VAL	REMARKS
S1	HEAT RUN	RUN OFF	
S2	SCREEN ADJUST	OEC : 650V	
		RCA : 850V	
S5	AGC LEVEL	22	
	IFOFF	37	
	QSS	1	
	BPB	1	
	FMI	1	
	AGN	0	
	BPBS	1	
	DSG	RF:0, AV:1	
	Fine Tunning		
	FILTBW	0	
	IDMOD	1	
	OVMTHR	1	
	IDMOD SLOW KOR	1	
S6	V.SIZE	43	
	V.CENTER	42	
	V.SLOPE	28	
	V.LINEARITY	37	
	S_CORRECTION	32	
	H.CENTER	45	
	H.SIZE	54	
	H.PARALLEL	33	
	H-BOW	35	
	PARABOLA	17	
	EW TRAPEZ	38	
	CORNER TOP	54	
	CORNER BOTTOM	46	
S7-1	CFCLF	1	
	YD TV	RF:4, AV:7	
	DTR	0	
	BPYD	0	
	TCCON	1	
	TCI2X	0	
	PF	3	
	TFR	1	
	NRR	0	
	WS	3	
	BLS	0	
	DSK	0	
	AAS	2	
	BSD	0	
	BKS	1	
	DSA	0	
	RPO	3	
	RPA	2	
	BPD	0	

MODE	NAME	VAL	REMARKS
S7-2	SOC	0	
	PWLDAC	0	
	CL	10	
	CLD	0	
	GAM	1	
	HCT	0	
	ACL	0	
	BPS	1	
	CHSE	2	
	FCO	0	
	CBPS	1	
	CB	0	
	MUS	0	
	FFI	0	
S8	R-GAIN	32	
	G-GAIN	32	
	B-GAIN	40	
	R-BIAS	32	
	G-BIAS	32	
	SRC R-BIAS	32	
	SRC G-BIAS	32	
	CVI R-BIAS	-8	
	CVI G-BIAS	10	
S9	DP-Brightness	10	
	DP-Contrast	10	
	DP-Color	5	
	DP-Sharpness	18	
S10	OPTION		
S12	FACTORY SET		

2. ASSEMBLY ADJUSTMENTS

1) SCREEN ADJUSTMENT (S2)

- Enter the service mode and select service adjustment S2.
- You can see the one horizontal line on the screen.
- Adjust the Screen Control Volume (located on FBT) so that the horizontal line onscreen may be disappeared.
- Press S2 button to exit in the screen adjustment mode.

2) FOCUS ADJUSTMENT

- Turn in a local station and adjust the Focus Control knob (located on FBT) for best picture details at high light condition.

3) AGC ADJUSTMENT

- Adjust the antenna signal level at 60 dBuV
- Tune a colour bar pattern.
- Find the "AGC" item in service mode.
  (it's two way to entering the "AGC" item in service mode)
  - Enter the service mode and select service adjustment S5 and select AUTO-AGC.
  - Enter the service mode and select service adjustment S3.
- Wait until AGC level stabilise to the optimum value.

- Alternatively,
  Enter the service mode and select service adjustment S5 and select AGC LEVEL.
  Use "Vol Up/Dwn" keys to adjust manually to the desired Tuner Take Over Point.

4) GEOMETRIC ADJUSTMENTS (S6)

- Select service adjustment S6
- You can see the OSD as shown in below.

V.SIZE	43	H.PARALLEL	33
V.CENTER	42	H-BOW	35
V.SLOPE	28	PARABOLA	17
V.LINEARITY	37	EW TRAPEZ	38
S_CORRECT	32	CORNER TOP	54
H.CENTER	45	CORNER BOTTOM	46
H.SIZE	54		

▲ ▼ SELECT ◀ ▶ ADJUST ■ EXIT

4-1). Horizontal Position Adjustment

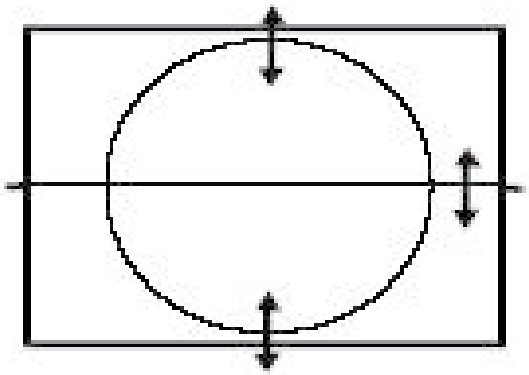
- Select H.CENTER item, adjust H.CENTER data value to obtain proper horizontal centering of the internal cross pattern at the left and right of the screen.

4-2). Vertical Position Adjustment

- Select V.SLOPE item, adjust V.SLOPE data value to equalize half the screen with center of the picture.
- Select V.CENTER item, adjust V.CENTER data value to center the raster properly on the screen.

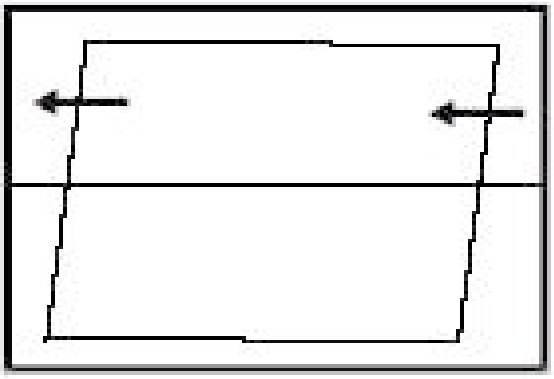
4-3). Vertical Size Adjustment

- Select V.SIZE item, adjust V.SIZE data value to proper vertical size as follows.
- Select V.LINEARITYitem, adjust V.LINEARITYdata value to proper vertical linearty.

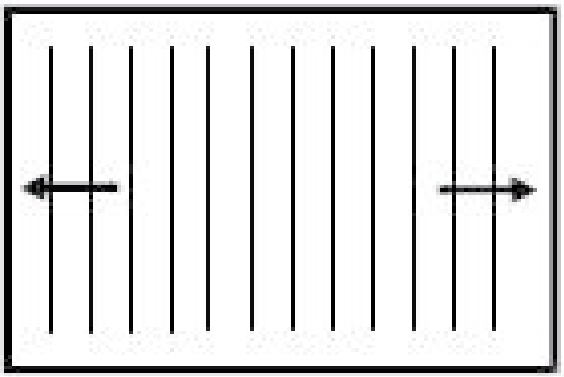


4-4). EAST / WEST Adjustment

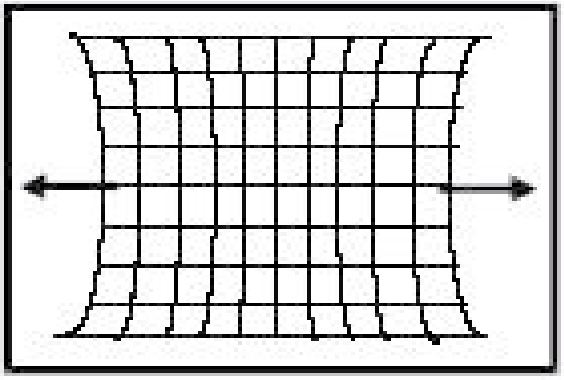
- Adjust the H.PARALLEL, H.SIZE, H-BOW, PARABOLA, EW TRAPEZ, CORNER TOP, CORNER BOTTOM to compensate for geometrical distortion.



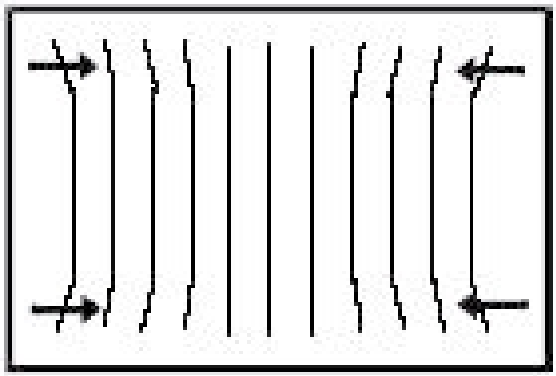
H.PARALLEL



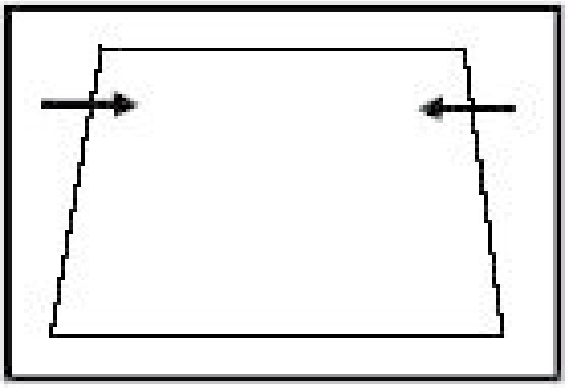
H.SIZE



PARABOLA



CORNER TOP, CORNER BOTTOM



EW TRAPEZ

5) WHITE BALANCE ADJUSTMENT(S8)

- Receive a good local channel.
- Enter the service mode and select service adjustment S8.
- You can see the OSD as shown in below.

R-GAIN	32	SRC R-BIAS	32
G-GAIN	32	SRC G-BIAS	32
B-GAIN	40	CVI R-BIAS	-8
R-BIAS	32	CVI G-BIAS	10
G-BIAS	32		

▲ ▼ SELECT ◀ ▶ ADJUST ■ EXIT

- Using volume up or volume down, adjust service adjustment data of R-GAIN/G-GAIN/B-GAIN and R-BIAS/G-BIAS until a good gray scale with normal whites is obtained.ALIGNMENT INSTRUCTIONS

6) DIGITAL PRESET(D.P) ADJUSTMENTS(S9)

SUBBRIGHTNESS ADJUSTMENT

- Receive a good local channel.
- Enter the service mode and select service adjustment S9.
- You can see the OSD as shown in below.

DP-Brightnes	10
DP-Contrast	10
DP-Color	5
DP-Sharpnes	18

▲ ▼ SELECT ◀ ▶ ADJUST ■ EXIT

- Select DP-Brightness item, adjust DP-Brightness data value to obtain normal brightness level.

DP-Contrast

- Fixed value = 10

DP-Color

- Fixed value = 5

DP-Sharpness

- Fixed value = 18

7) FACTORY OUTGOING MODE (S12 : FACT)

- If you select the S12, then the set becomes factory outgoing status.
- You can see the OSD "SHIPPING OFF"

IC DESCRIPTION

1. UOC III RERIES

1-1. UOC III BLOCK DIAGRAM

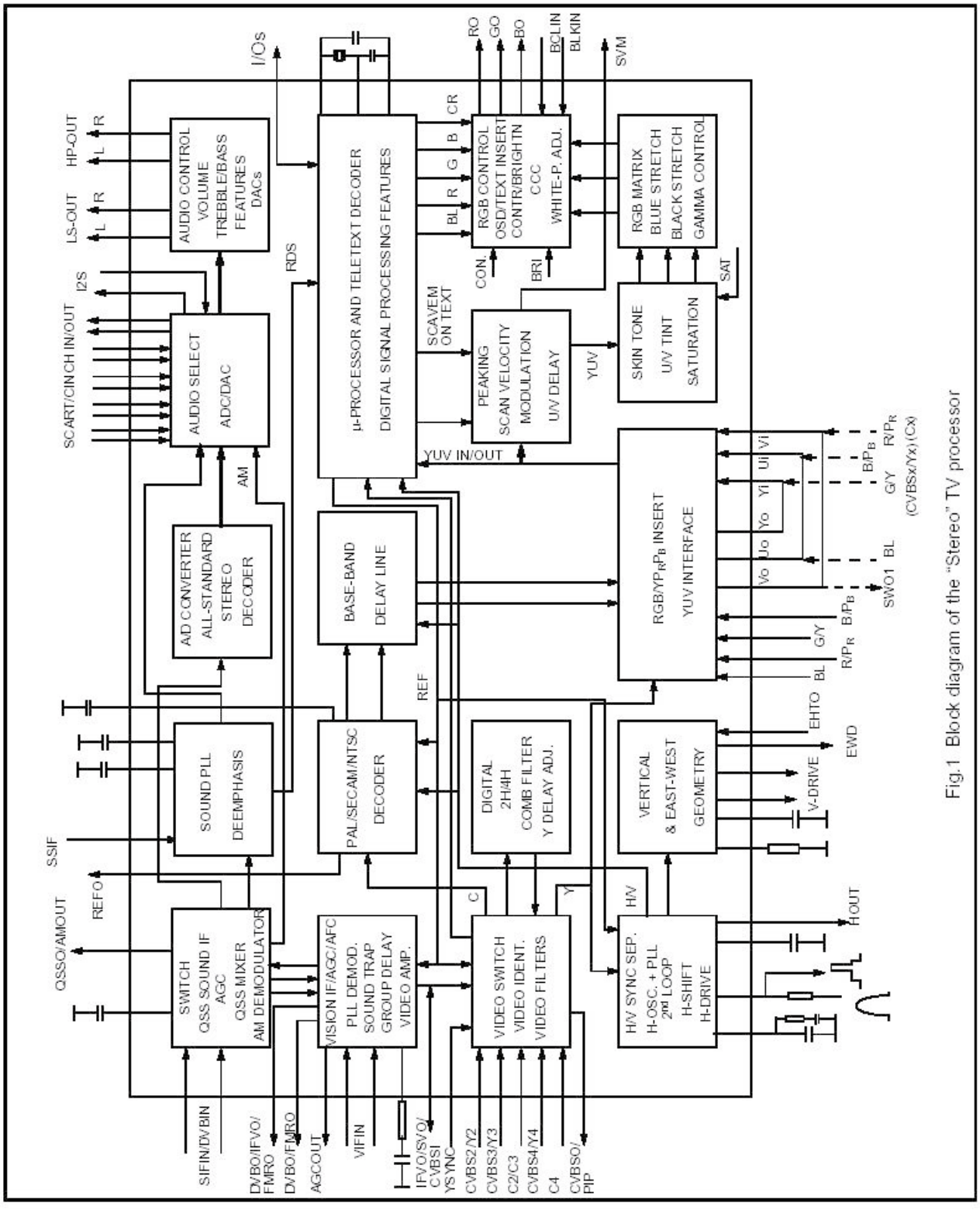


Fig.1 Block diagram of the "Stereo" TV processor

2. TDA8358J VERTICAL AMPLIFIER

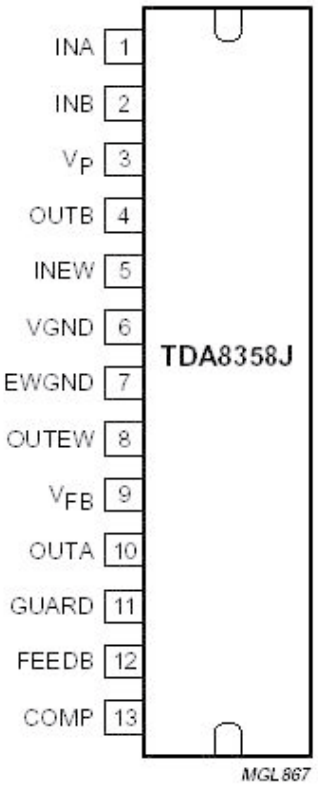
The TDA8358J are power circuit for use in 90° and 110° colour deflec tion systems for field frequencies of 25 to 200Hz field frequencies, and for 4:3 and 16/9 picture tubes. The IC contains a vertical deflection output circuit, operating as a high efficiency class G system. The full bridge output circuit allows DC coupling of the deflection coil in combination with single positive supply voltages.

The east-west output stage is able to supply the sink current for a diode modulator circuit.

The IC is constructed in a Low Voltage DMOS(LVDMOS) process that combines bipolar, CMOS and DMOS devices. DMOS transistors are used in the output stage because of the absence of second breakdown.

Features :

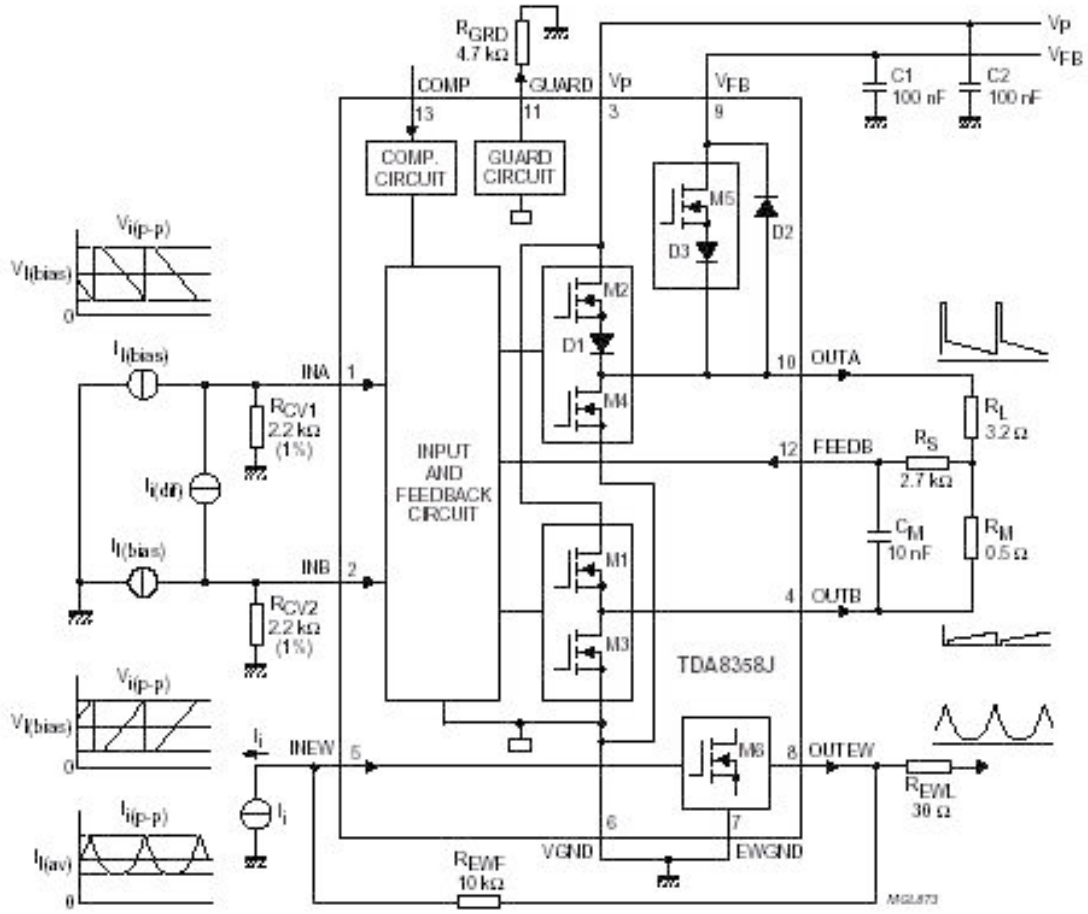
- Few external components
- Highly efficient fully DC-coupled vertical bridge output circuit
- Vertical flyback switch with short rise and fal times
- Built-in guard circuit
- Thermal protection circuit
- Improved EMC performance due to differential inputs
- East-west output stage



IC DESCRIPTION

Pinning

Pin	Symbol	Description
1	INA	Positeve vertical input
2	INB	Negative vertical input
3	V_P	Supply voltage
4	OUTB	Vertical output voltage B
5	INEW	East-west input voltage
6	VGND	Vertical ground
7	EWGND	East-west ground
8	OUTEW	East-west output voltage
9	V_{FB}	Flyback supply voltage
10	OUTA	Vertical output voltage A
11	GUARD	Guard output voltage
12	FEEDB	Input measuring resistor
13	COMP	Input compensation current



Block diagram TDA8358J

3. TDA6107AJF

The TDA6107AJF includes three video output amplifiers and is intended to drive the three cathodes of a colour CRT directly. The device is contained in a plastic DIL-bent-SIL 9-pin medium power(DBS9MPF) package, and uses high-voltage DMOS technology.

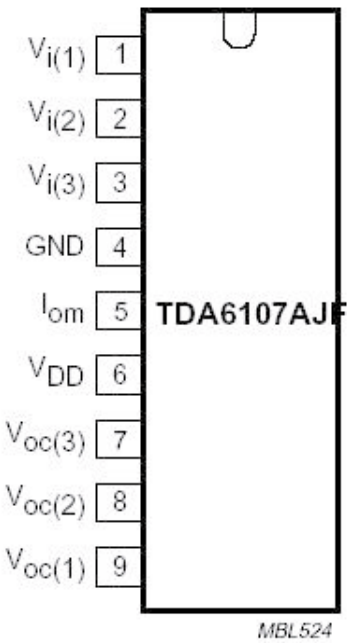
To obtain maximum performance, the amplifier should be used with black-current control.

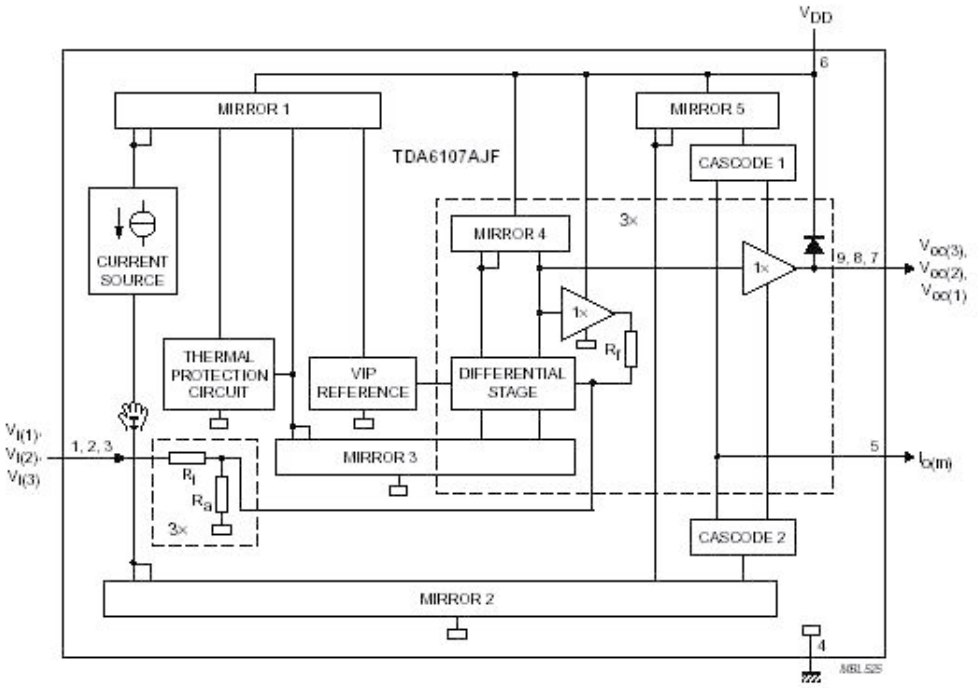
Features

- Typical bandwidth of 5.5 MHz for an output signal of 60 Vpp
- High slew rate of 900V/ms
- No external components required
- Very simple application
- Single supply voltage of 200V
- Internal reference voltage of 2.5 V
- Fixed gain of 81.
- Black-current stabilisation (BCS) circuit with voltage window from 1.8 to 6 V and current window form 100uA to -10mA
- Thermal protection
- Internal protection against positive flashover discharges appearing on the CRT

Pin description

Pin	Symbol	Description
1	$V_{i(1)}$	inverting input 1
2	$V_{i(2)}$	inverting input 2
3	$V_{i(3)}$	inverting input 3
4	GND	ground (fin)
5	I_{om}	black current measurement output
6	V_{DD}	supply voltage
7	$V_{OC(3)}$	cathode output 3
8	$V_{OC(2)}$	cathode output 2
9	$V_{OC(1)}$	cathode output 1





Block diagram TDA6107AJF

4. 24WC16 - 16 KB EEPROM

Features :

- 16 Kbit serial I2C bus EEPROM
- 400KHz I2C Bus Compatible
- supply voltage : 1.8 V to 6.0 V
- Low Power CMOS Technology
- 1 Million Erase/Write cycles (minimum)
- 100 year data retention (minimum)

Pin description

Pin No.	Name	Description
1, 2, 3	A0, A1, A2	Device address – not used
5	SDA	Serial Data/Address Input/Output
6	SCL	Serial clock
7	WP	Write control
8	Vcc	Supply voltage
4	Vss	Ground

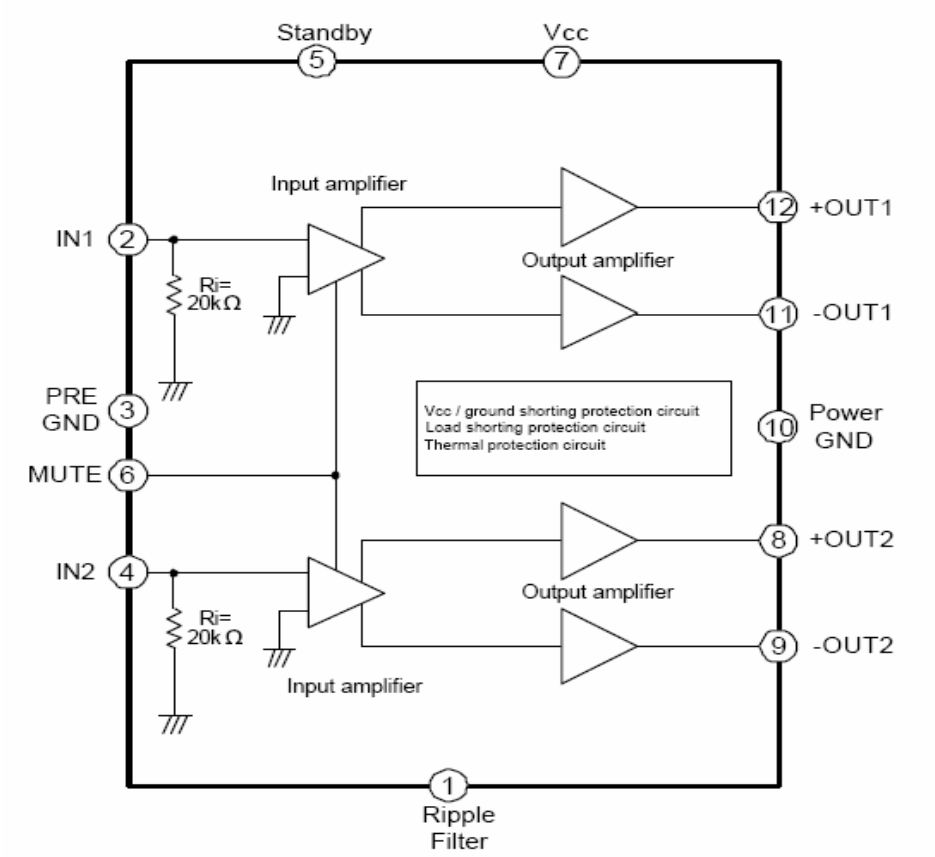
The memory device is compatible with the I2C memory standard. This is a two wire serial interface that uses a bi-directional data bus and serial clock. The memory carries a built-in 4-bit unique device type identifier code (1010) in accordance with the I2C bus definition.

Serial Clock (SCL)
The SCL input is used to strobe all data in and out of the memory.
Serial Data (SDA)
The SDA pin is bi-directional, and is used to transfer data in or out of the memory.

5. LA42072N-E AUDIO AMPLIFIER

LA42000 series is power IC which made Pin compatible possible a ltogether in 5 to 15W.
They consist of four kinds of power ICs.
(mono, stereo, mono with volume function , stereo with volume function.£ '
They realized PCB layout communalization of an audio power block of TV.

Block Diagram



Operating Characteristics at Ta = 25¡ ,VCC = 12V,RL = 8¥ ,f = 1kH z,Rg = 600¥

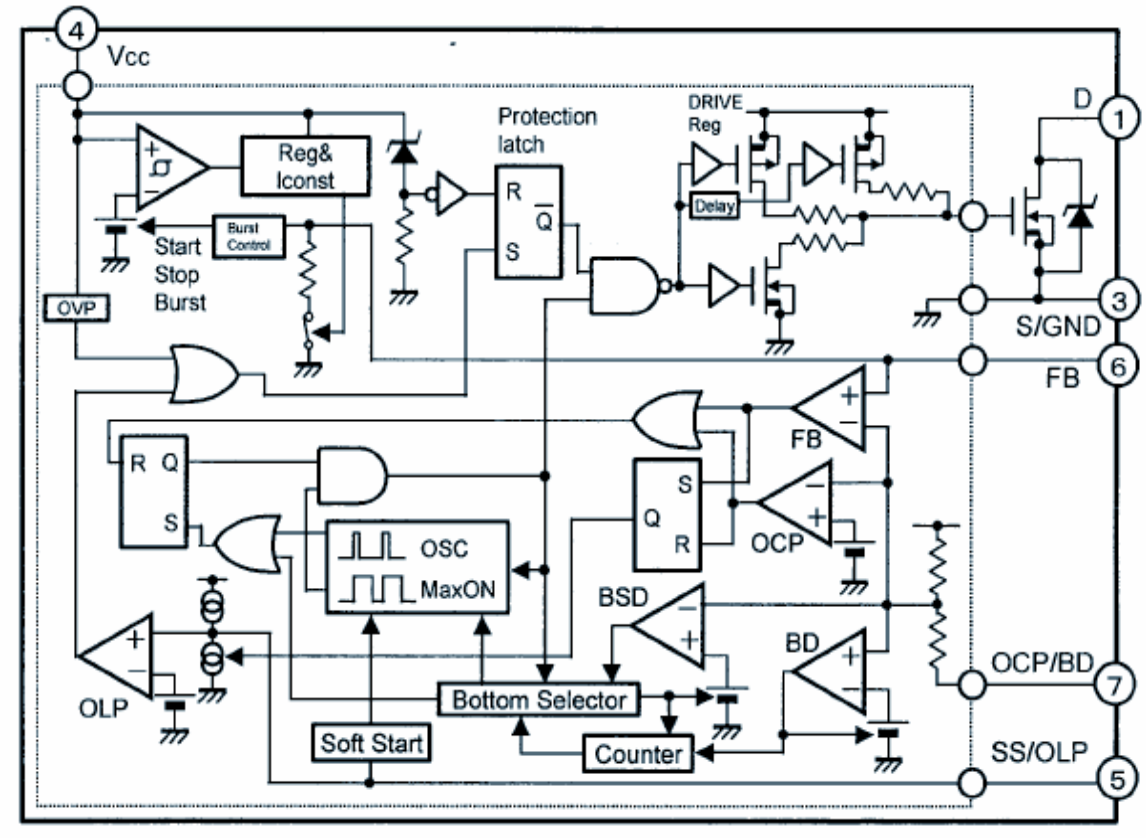
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Quiescent current	I_{CCO}	Rg=0	40	70	150	mA
Output power	Po	THD=10%	6	7	-	W
Total harmonic distortion	THD	Po=1W	-	0.06	0.2	%
Voltage gain	VG	Vo=0dBm	33	35	37	dB
Output noise voltage	V_{NO}	Rg=0,BPF=20Hz to 20kHz	-	0.1	0.3	mVrms
Ripple rejection	SVRR	Rg=0,f_R=100Hz,V_{CCR}=0dBm	50	60	-	dB
Channel separation	Sep.	Rg=10k¥ , Vo=0dBm	50	60	-	dB
Muting attenuation	A_{TT}	Vo=1Vrms, BPF=20Hz to 20k H	80	90	-	dB
Muting control voltage £¤The Pin 6 voltage£ '	V_{MUTE} - H	Muting on	1.7	-	3.0	V
	V_{MUTE} - L	Muting off	0	-	0.5	V
Standby control voltage (The Pin 5 voltage£ '	V_{STB} - H	Amplifier on	2.5	-	20	V
	V_{STB} - L	Amplifier off	0	-	0.5	V
Input resistance	Ri		21	30	39	k¥

6. STR-W6735

FUNCTIONS OF EACH TERMINAL

TERMINAL No.	SYMBOLS	DESCRIPTIONS	FUNCTIONS
1	D	DRAIN TERMINAL	MOSFET DRAIN
3	S/GND	SOURCE/GND	MOSFET SOURCE / GND
4	Vcc	SET UP TERMINAL	INPUT OF POWER SUPPLY FOR CONTROL CIRCUIT
5	SS/OLP	DELAY AT OVERLOAD / SOFT START SET UP TERMINAL	OVERLOAD PROTECTION AND SOFT START OPERATION TIME SET UP
6	FB	FEEDBACK TERMINAL	CONSTANT VOLTAGE CONTROL SIGNAL INPUT, BURST(INTERMITTENT) MODE OSCILLATION
7	OCP/BD	OVERCURRENT PROTECTION INPUT / BOTTOM DETECTION TERMINAL	OVERCURRENT DETECTION SIGNAL INPUT / BOTTOM DECTION SIGNAL INPUT

BLOCK DIAGRAM

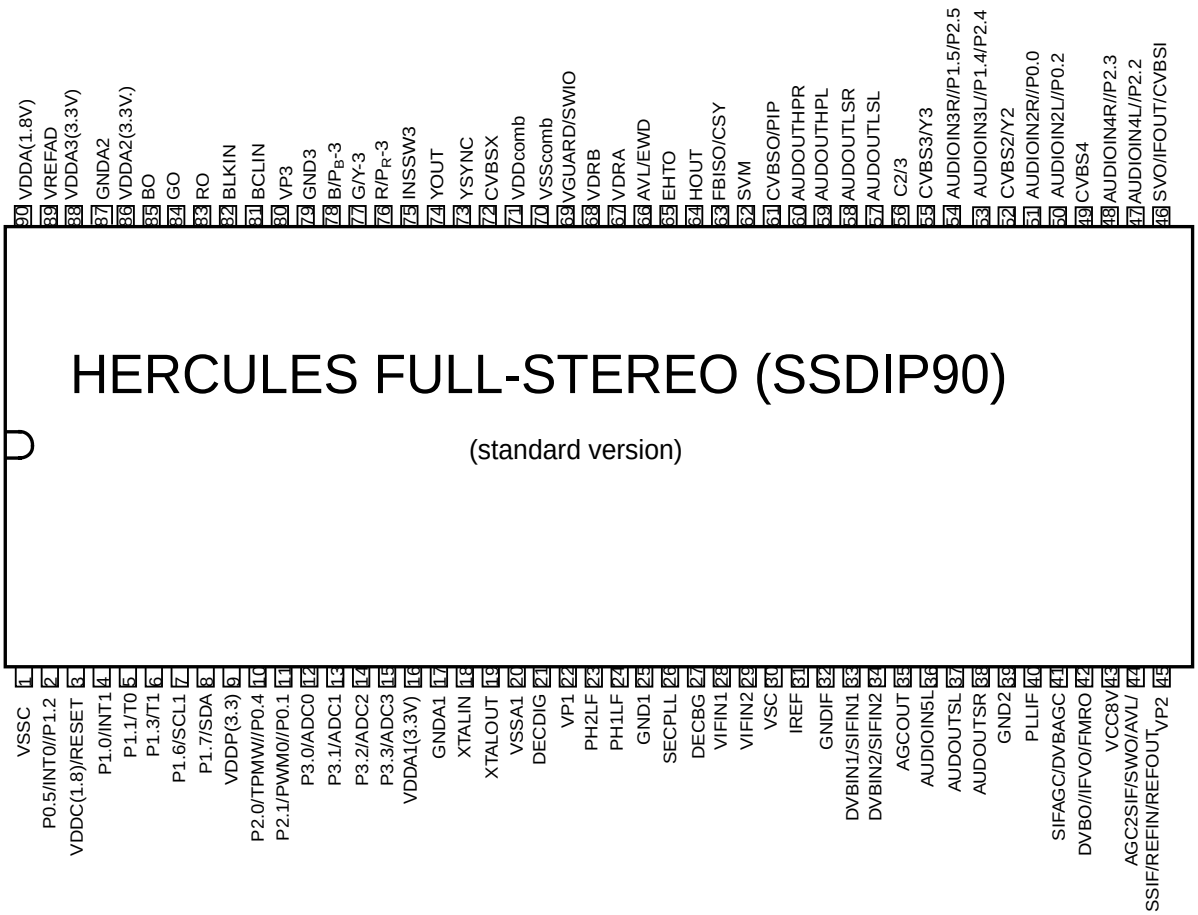


ELECTRICAL CHARACTERISTICS IN CONTROL PART

(Ta=25¡ , Vcc=20V, UNLESS OTHERWISE SPECIFIED)

PARAMETER	TERMINAL	SYMBOL	RATINGS			UNITES
			MIN	TYP	MAX	
POWER SUPPLY START-UP OPERATION						
OPERATION START VOLTAGE	4-3	Vcc(on)	16.3	18.2	19.9	V
OPERATION STOP VOLTAGE	4-3	Vcc(off)	8.8	9.7	10.6	V
CIRCUIT CURRENT IN OPERATION	4-3	Icc(on)			6	mA
CIRCUIT CURRENT IN NON-OPERATION	4-3	Icc(off)			100	uH
OSCILLATION FREQUENCY	1-3	fosc	19	22	25	kHz
SOFT START OPERATION STOP VOLTAGE	5-3	Vssolp(ss)	1.1	1.2	1.4	v
SOFT START OPERATION CHARGING CURRENT	5-3	Issolp(ss)	-710	-550	-390	uA
NORMAL OPERATION						
BOTTOM-SKIP OPERATION THRESHOLD VOLTAGE1	7-3	Vocpbd(bs1)	-0.72	-0.660	-0.61	V
BOTTOM-SKIP OPERATION THRESHOLD VOLTAGE2	7-3	Vocpbd(bs2)	-0.485	-0.435	-0.385	V
OVERCURRENT DETECTION THRESHOLD VOLTAGE	7-3	Vocpbd(lim)	-0.995	-0.940	-0.895	V
OCP/BD TERMINAL OUTFLOW CURRENT	7-3	Iocpbd	-250	-100	-40	uA
QUASI-RESONANT OPERATION THRESHOLD VOLTAGE1	7-3	Vocpbd(th1)	0.28	0.40	0.52	V
QUASI-RESONANT OPERATION THRESHOLD VOLTAGE2	7-3	Vocpbd(th2)	0.67	0.80	0.93	V
FB TERMINAL THRESHOLD VOLTAGE	6-3	Vfb(off)	1.32	1.45	1.58	V
FB TERMINAL INFLOW CURRENT(NORMAL OPERATION)	6-3	Ifb(on)	600	1000	1400	uA
STAND-BY OPERATION						
STAND-BY OPERATION START VOLTAGE	4-3	Vcc(s)	10.3	11.2	12.1	V
STAND-BY OPERATION START VOLTAGE INTERVAL	4-3	Vcc(sk)	1.20	1.45	1.65	V
STAND-BY NON-OPERATION CIRCUIT CURRENT	4-3	Icc(s)		20	56	uA
FB TERMINAL INFLOW CURRENT(STAND-BY)	1-3	Ifb(s)		4	14	uA
STAND-BY OPERATION FB TERMINAL THRESHOLD VOLTAGE	6-3	Vfb(s)	0.55	1.10	1.50	V
MINIMUM ON TIME	1-3	Ton(min)		0.75	1.20	uSec
PROTECTION OPERATION						
MAXIMUM ON TIME	1-3	Ton(max)	27.5	32.5	39.0	uSec
OLP OPERATION THRESHOLD VOLTAGE	5-3	Vssolp(olp)	4.0	4.8	5.8	V
OLP OPERATION CHARGING CURRENT	5-3	Issolp(olp)	-16	-11	-6	uA
OLP OPERATION VOLTAGE	4-3	Vcc(ovp)	25.5	27.7	29.9	V
LATCH CIRCUIT HOLDING CURRENT	4-3	Icc(h)		45	140	uA
LATCH CIRCUIT RELEASE VOLTAGE	4-3	Vcc(la.off)	6.0	7.2	8.5	V

UOC III SERIES



SYMBOL	STANDARD VERSION			FACE DOWN VERSION			DESCRIPTION
	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	
VSSP2	1	1		128	90		ground
VSSC4	2	1		127	90		ground
VDDC4	3	3		126	88		digital supply to SDACs (1.8V)
VDDA3(3.3V)	4	16		125	75		supply (3.3 V)
VREF_POS_LSL	5	16		124	75		positive reference voltage SDAC (3.3 V)
VREF_NEG_LSL+HPL	6	17		123	74		negative reference voltage SDAC (0 V)
VREF_POS_LSR+HPR	7	16		122	75		positive reference voltage SDAC (3.3 V)
VREF_NEG_HPL+HPR	8	17		121	74		negative reference voltage SDAC (0 V)
VREF_POS_HPR	9	16		120	75		positive reference voltage SDAC (3.3 V)
XTALIN	10	18		119	73		crystal oscillator input
XTALOUT	11	19		118	72		crystal oscillator output
VSSA1	12	20		117	71		ground
VGUARD/SWIO	13	69		116	22		V-guard input / I/O switch (e.g. 4 mA current sinking capability for direct drive of LEDs)
DECDIG	14	21		115	70		decoupling digital supply
VP1	15	22		114	69		1st supply voltage TV-processor (+5 V)
PH2LF	16	23		113	68		phase-2 lter
PH1LF	17	24		112	67		phase-1 lter
GND1	18	25		111	66		ground 1 for TV-processor
SECPLL	19	26		110	65		SECAM PLL decoupling
DECBG	20	27		109	64		bandgap decoupling
EWD/AVL (1)	21	66		108	25		East-West drive output or AVL capacitor
VDRB	22	68		107	23		vertical drive B output
VDRA	23	67		106	24		vertical drive A output
VIFIN1	24	28		105	63		IF input 1

IC DESCRIPTION

SYMBOL	STANDARD VERSION			FACE DOWN VERSION			DESCRIPTION
	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	
VIFIN2	25	29		104	62		IF input 2
VSC	26	30		103	61		vertical sawtooth capacitor
IREF	27	31		102	60		reference current input
GNDIF	28	32		101	59		ground connection for IF ampli er
SIFIN1/DVBIN1 (2)	29	33		100	58		SIF input 1 / DVB input 1
SIFIN2/DVBIN2 (2)	30	34		99	57		SIF input 2 / DVB input 2
AGCOUT	31	35		98	56		tuner AGC output
EHTO	32	65		97	26		EHT/overvoltage protection input
AVL/SWO/SSIF/ REFO/REFIN (2)	33	44		96	47		Automatic Volume Levelling / switch output / sound IF input / subcarrier reference output / external reference signal input for I signal mixer for DVB operation
AUDIOIN5	-	-		-	-		audio 5 input
AUDIOIN5L	34	36/-		95	55/-		audio-5 input (left signal)
AUDIOIN5R	35	-		94	-		audio-5 input (right signal)
AUDOUTSL	36	37		93	54		audio output for SCART/CINCH (left signal)
AUDOUTSR	37	38		92	53		audio output for SCART/CINCH (right signal)
DECSDEM	38	-/72		91	-/19		decoupling sound demodulator
QSSO/AMOUT/AUDEEM (2)	39	-/36		90	-/55		QSS intercarrier output / AM output / deemphasis (front-end audio out)
GND2	40	39		89	52		ground 2 for TV processor
PLLIF	41	40		88	51		IF-PLL loop lter
SIFAGC/DVBAGC (2)	42	41		87	50		AGC sound IF / internal-external AGC for DVB applications
DVBO/IFVO/FMRO (2)	43	42		86	49		Digital Video Broadcast output / IF video output / FM radio output
DVBO/FMRO (2)	44	-		85	-		Digital Video Broadcast output / FM radio output
VCC8V	45	43		84	48		8 Volt supply for audio switches

SYMBOL	STANDARD VERSION			FACE DOWN VERSION			DESCRIPTION
	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	
AGC2SIF	46	44/-		83	47/-		AGC capacitor second sound IF
VP2	47	45		82	46		2nd supply voltage TV processor (+5 V)
IFVO/SVO/CVBSI (2)	48	46		81	45		IF video output / selected CVBS output / CVBS input
AUDIOIN4	-	-		-	-		audio 4 input
AUDIOIN4L	49	47		80	44		audio-4 input (left signal)
AUDIOIN4R	50	48		79	43		audio-4 input (right signal)
CVBS4/Y4	51	49		78	42		CVBS4/Y4 input
C4	52	-		77	-		chroma-4 input
AUDIOIN2	-	-		-	-		audio 2 input
AUDIOIN2L	53	50		76	41		audio 2 input (left signal)
AUDIOIN2R	54	51		75	40		audio 2 input (right signal)
CVBS2/Y2	55	52		74	39		CVBS2/Y2 input
AUDIOIN3	-	-		-	-		audio 3 input
AUDIOIN3L	56	53		73	38		audio 3 input (left signal)
AUDIOIN3R	57	54		72	37		audio 3 input (right signal)
CVBS3/Y3	58	55		71	36		CVBS3/Y3 input
C2/C3	59	56		70	35		chroma-2/3 input
AUDOUTLSL	60	57		69	34		audio output for audio power ampli er (left signal)
AUDOUTLSR	61	58		68	33		audio output for audio power ampli er (r ight signal)
AUDOUT/AMOUT/FMOUT	-	-		-	-		audio output / AM output / FM output, volume controlled
AUDOUTHPL	62	59		67	32		audio output for headphone channel (left signal)
AUDOUTHPR	63	60		66	31		audio output for headphone channel (right signal)
CVBSO/PIP	64	61		65	30		CVBS / PIP output

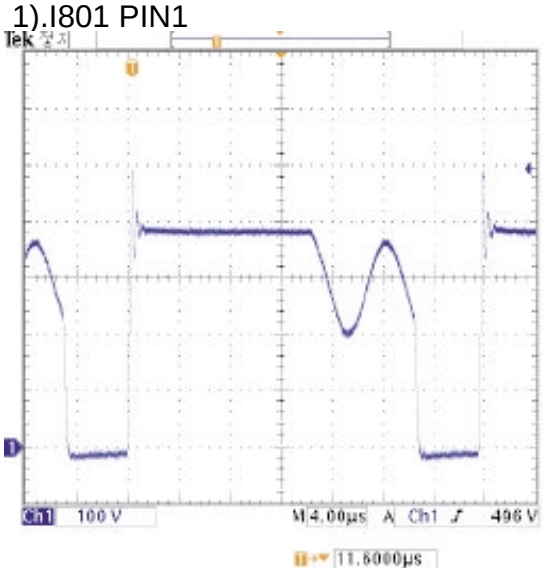
SYMBOL	STANDARD VERSION			FACE DOWN VERSION			DESCRIPTION
	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	
SVM	65	62		64	29		scan velocity modulation output
FBISO/CSY	66	63		63	28		ybac k input/sandcastle output or composite H/V timing output
HOUT	67	64		62	27		horizontal output
VSScomb	68	70		61	21		ground connection for comb lter
VDDcomb	69	71		60	20		supply voltage for comb lter (5 V)
VIN ($R/P_RIN2/C_X$)	70	-		59	-		V-input for YUV interface (2^{nd} R input / P_R input or C_X input)
UIN (B/PBIN2)	71	-		58	-		U-input for YUV interface (2^{nd} B input / PB input)
YIN ($G/YIN2/CVBS-Y_X$)	72	72/-		57	19/-		Y-input for YUV interface (2nd G input / Y input or CVBS/Y_X input))
YSYNC	73	73		56	18		Y-input for sync separator
YOUT	74	74		55	17		Y-output (for YUV interface)
UOUT (INSSW2)	75	-		54	-		U-output for YUV interface (2^{nd} RGB / YP_BP_R insertion input)
VOUT (SWO1)	76	-		53	-		V-output for YUV interface (general purpose switch output)
INSSW3	77	75		52	16		3^{rd} RGB / YP_BP_R insertion input
R/P_RIN3	78	76		51	15		3^{rd} R input / P_R input
G/YIN3	79	77		50	14		3^{rd} G input / Y input
B/P_BIN3	80	78		49	13		3^{rd} B input / P_B input
GND3	81	79		48	12		ground 3 for TV-processor
VP3	82	80		47	11		3^{rd} supply for TV processor
BCLIN	83	81		46	10		beam current limiter input
BLKIN	84	82		45	9		black current input
RO	85	83		44	8		Red output
GO	86	84		43	7		Green output
BO	87	85		42	6		Blue output

SYMBOL	STANDARD VERSION			FACE DOWN VERSION			DESCRIPTION
	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	
VDDA1	88	86		41	5		analog supply for TCG m-Controller and digital supply for TV-processor (+3.3 V)
VREFAD_NEG	89	87		40	4		negative reference voltage (0 V)
VREFAD_POS	90	88		39	3		positive reference voltage (3.3 V)
VREFAD	91	89		38	2		reference voltage for audio ADCs (3.3/2 V)
GNDA	92	87		37	4		ground
VDDA(1.8V)	93	90		36	1		analogue supply for audio ADCs (1.8 V)
VDDA2(3.3)	94	88		35	3		supply voltage SDAC (3.3 V)
VSSadc	95	1		34	90		ground for on-chip temperature sensor
VDDadc(1.8)	96	90		33	1		supply voltage video ADC
INT0/P0.5	97	2		32	89		external interrupt 0 or port 0.5 (4 mA current sinking capability for direct drive of LEDs)
P1.0/INT1	98	4		31	87		port 1.0 or external interrupt 1
P1.1/T0	99	5		30	86		port 1.1 or Counter/Timer 0 input
VDDC2	100	3		29	88		digital supply to core (1.8 V)
VSSC2	101	1		28	90		ground
P0.4/I2SWS	102	-		27	-		port 0.4 or I^2S word select
P0.4	-	-		-	-		port 0.4
P0.3/I2SCLK	103	-		26	-		port 0.3 or I^2S clock
P0.3	-	-		-	-		port 0.3
P0.2/I2SDO2	104	50		25	41		port 0.2 or I^2S digital output 2
P0.2	-	-		-	-		port 0.2
P0.1/I2SDO1	105	-		24	-		port 0.1 or I^2S digital output 1
P0.1	-	-		-	-		port 0.1
P0.0/I2SDI1/O	106	51		23	40		port 0.0 or I^2S digital input 1 or I^2S digital output
P0.0	-	-		-	-		port 0.0
P1.3/T1	107	6		22	85		port 1.3 or Counter/Timer 1 input

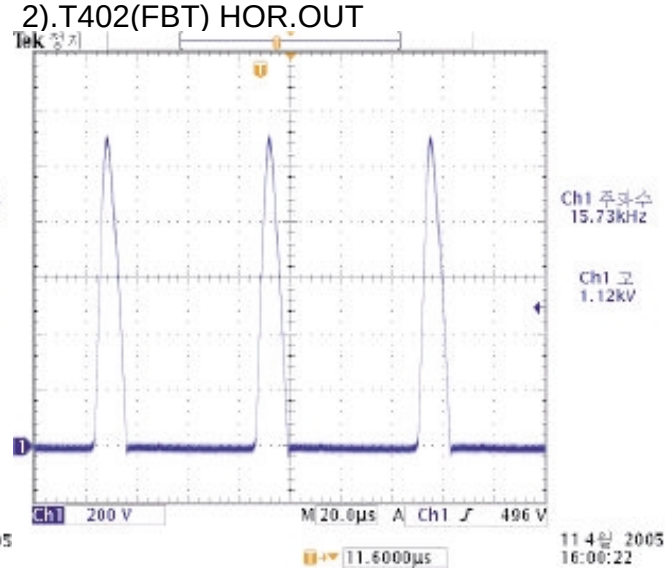
SYMBOL	STANDARD VERSION			FACE DOWN VERSION			DESCRIPTION
	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	STEREO + AV STEREO QFP128	FULL-STEREO/ MONO+ AV STEREO SSDIP90	MONO	
P1.6/SCL	108	7		21	84		port 1.6 or I^2C-bus clock line
P1.7/SDA	109	8		20	83		port 1.7 or I^2C-bus data line
VDDP(3.3V)	110	9		19	82		supply to periphery and on-chip voltage regulator (3.3 V)
P2.0/TPWM	111	10		18	81		port 2.0 or Tuning PWM output
P2.1/PWM0	112	11		17	80		port 2.1 or PWM0 output
P2.2/PWM1	113	47		16	44		port 2.2 or PWM1 output
P2.3/PWM2	114	48		15	43		port 2.3 or PWM2 output
P3.0/ADC0	115	12		14	79		port 3.0 or ADC0 input
P3.1/ADC1	116	13		13	78		port 3.1 or ADC1 input
VDDC1	117	3		12	88		digital supply to core (+1.8 V)
DECV1V8	118	3		11	88		decoupling 1.8 V supply
P3.2/ADC2	119	14		10	77		port 3.2 or ADC2 input
P3.3/ADC3	120	15		9	76		port 3.3 or ADC3 input
VSSC/P	121	1		8	90		digital ground for m-Controller core and periphery
P2.4/PWM3	122	53		7	38		port 2.4 or PWM3 output
P2.5/PWM4	123	54		6	37		port 2.5 or PWM4 output
VDDC3	124	3		5	88		digital supply to core (1.8V)
VSSC3	125	1		4	90		ground
P1.2/INT2	126	2		3	89		port 1.2 or external interrupt 2
P1.4/RX	127	53		2	38		port 1.4 or UART bus
P1.5/TX	128	54		1	37		port 1.5 or UART bus

WAVEFORMS

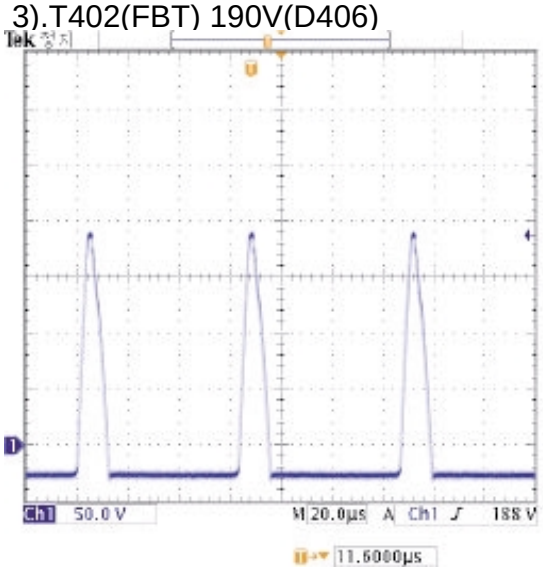
1).I801 PIN1



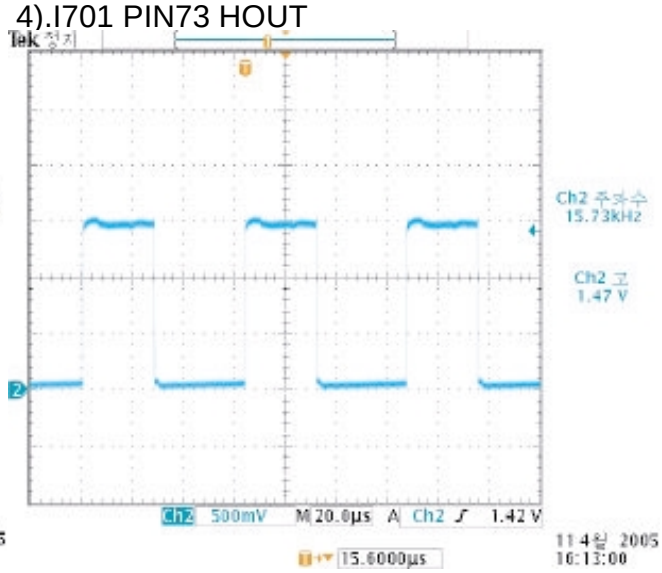
2).T402(FBT) HOR.OUT



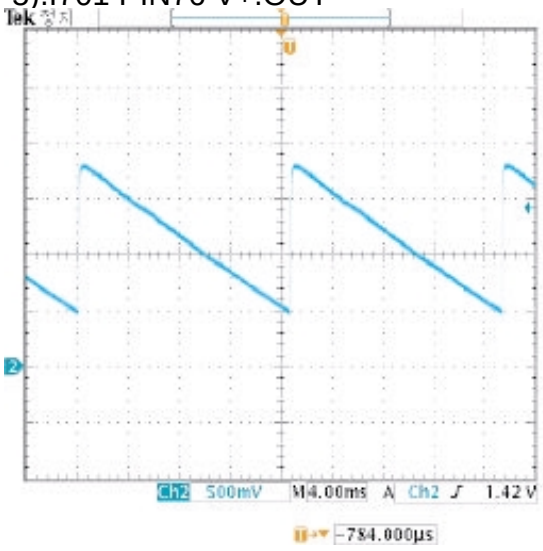
3).T402(FBT) 190V(D406)



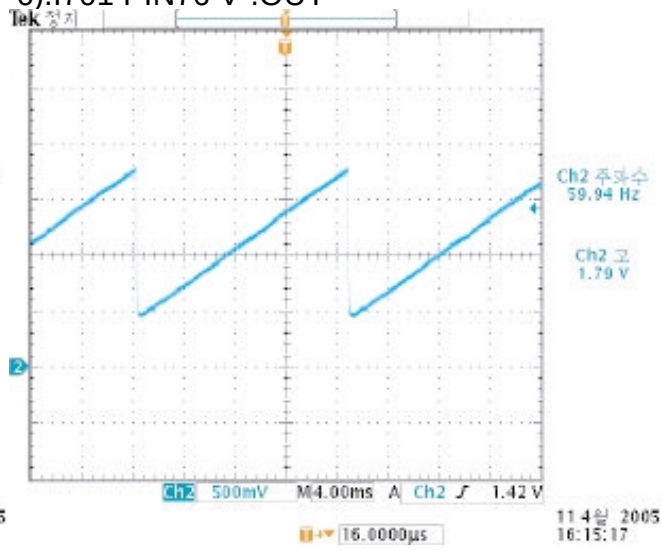
4).I701 PIN73 HOUT



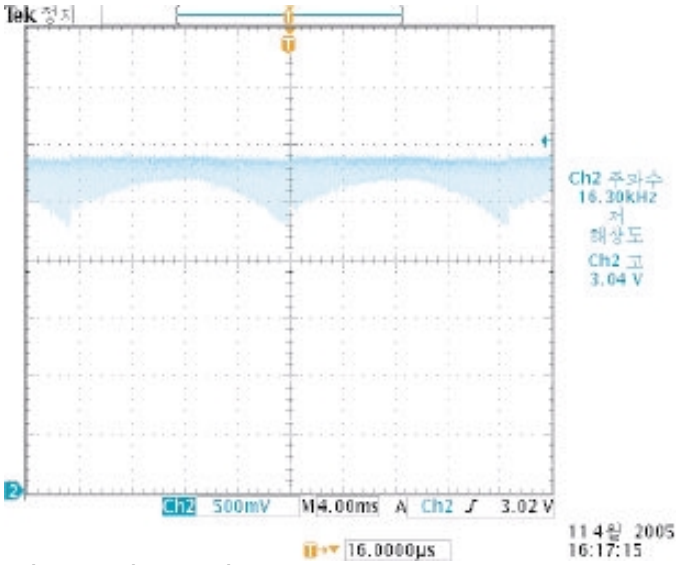
5).I701 PIN76 V+.OUT



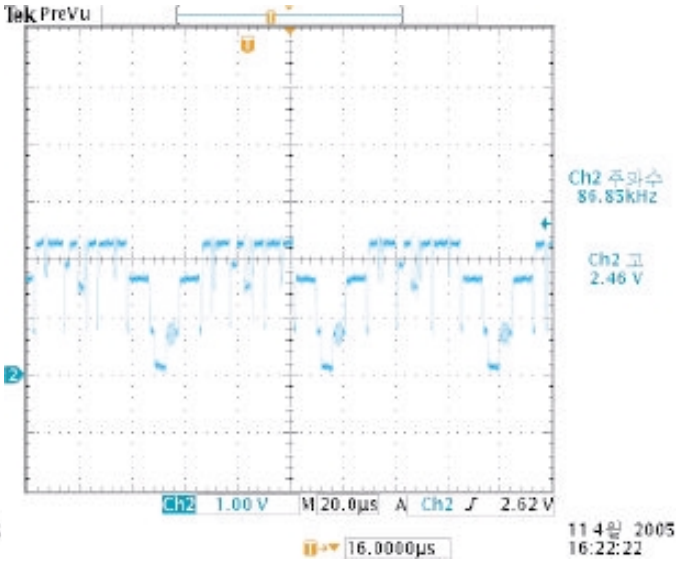
6).I701 PIN76 V-.OUT



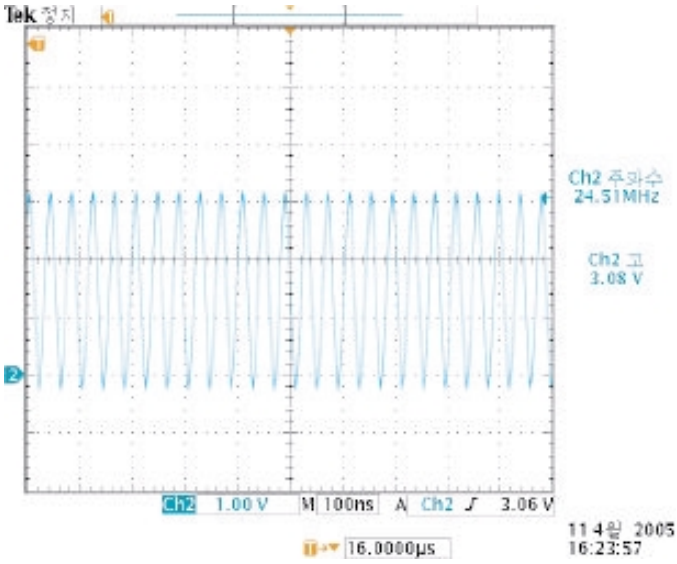
7).I701 PIN75 EW OUT



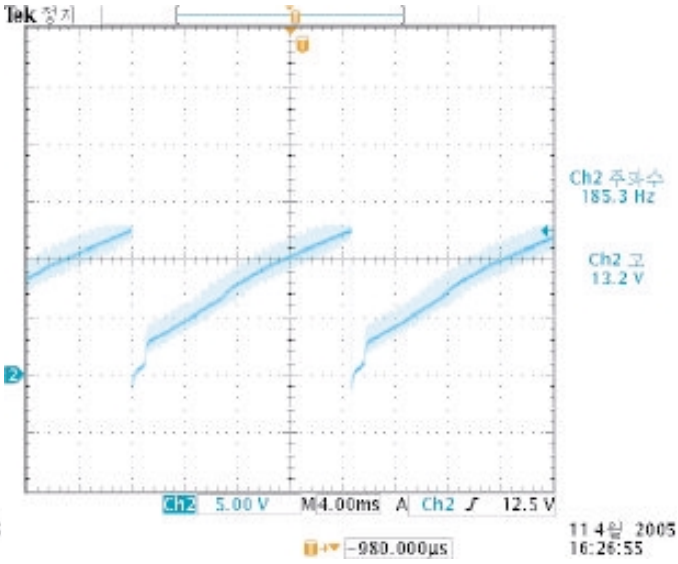
8).I701 PIN46 MONITOR OUT



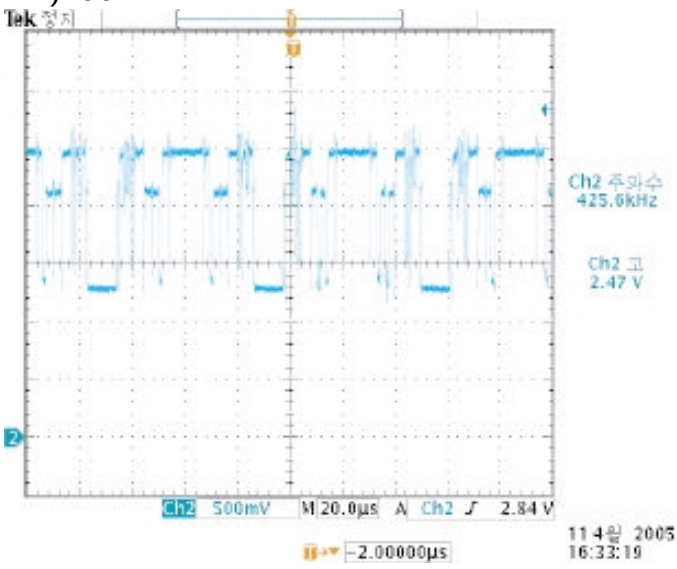
9).I701 (X-TAL)



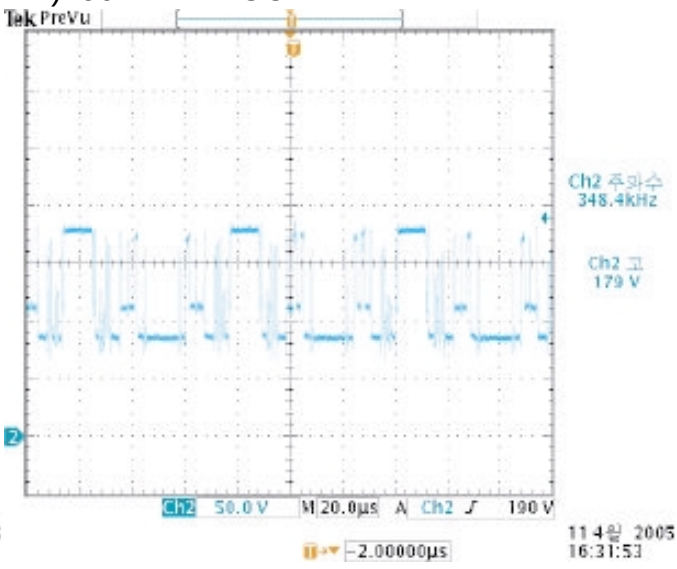
10).I301 PIN4 V.OUT



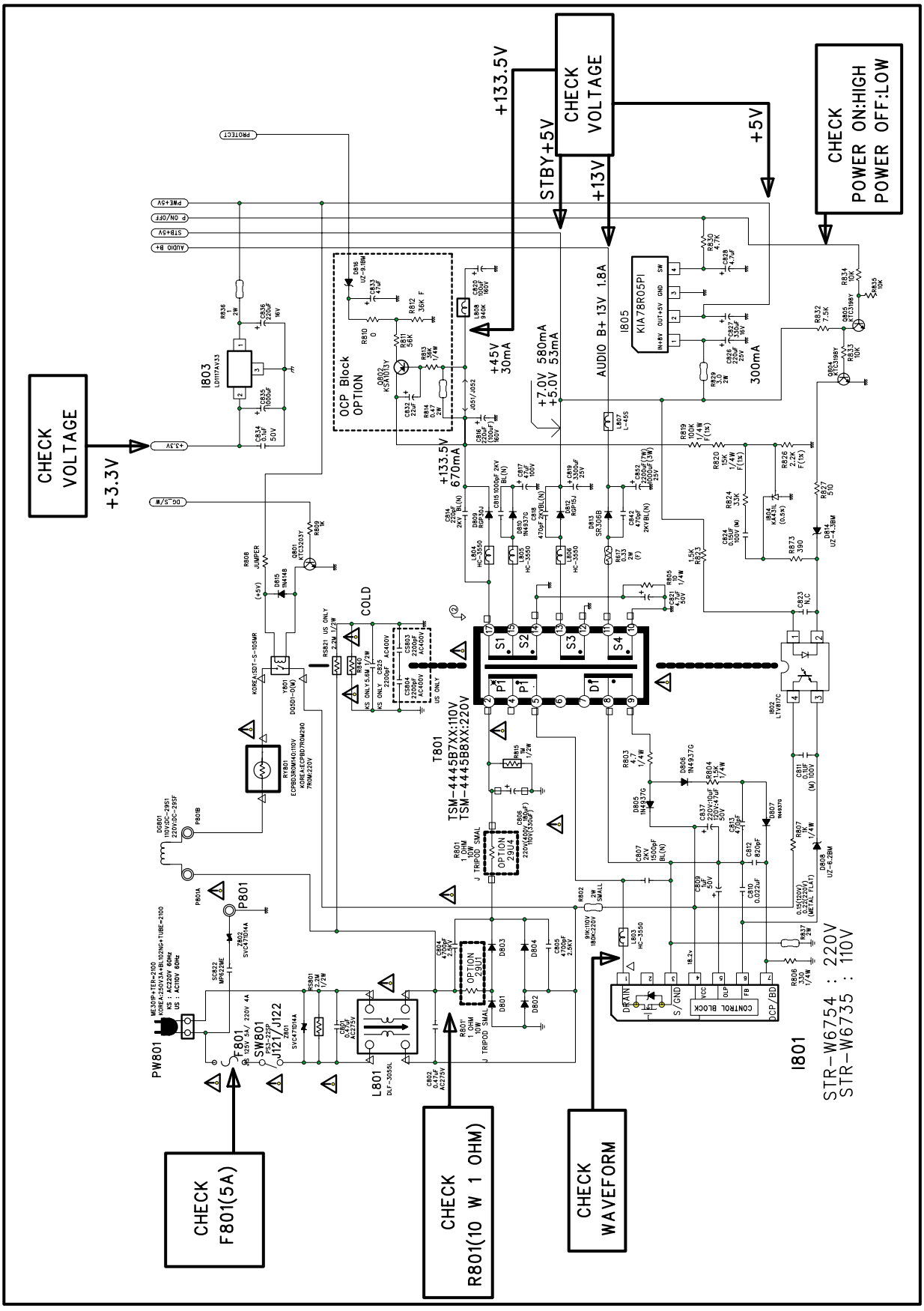
11).I901 PIN R.IN



12).I901 PIN R.OUT

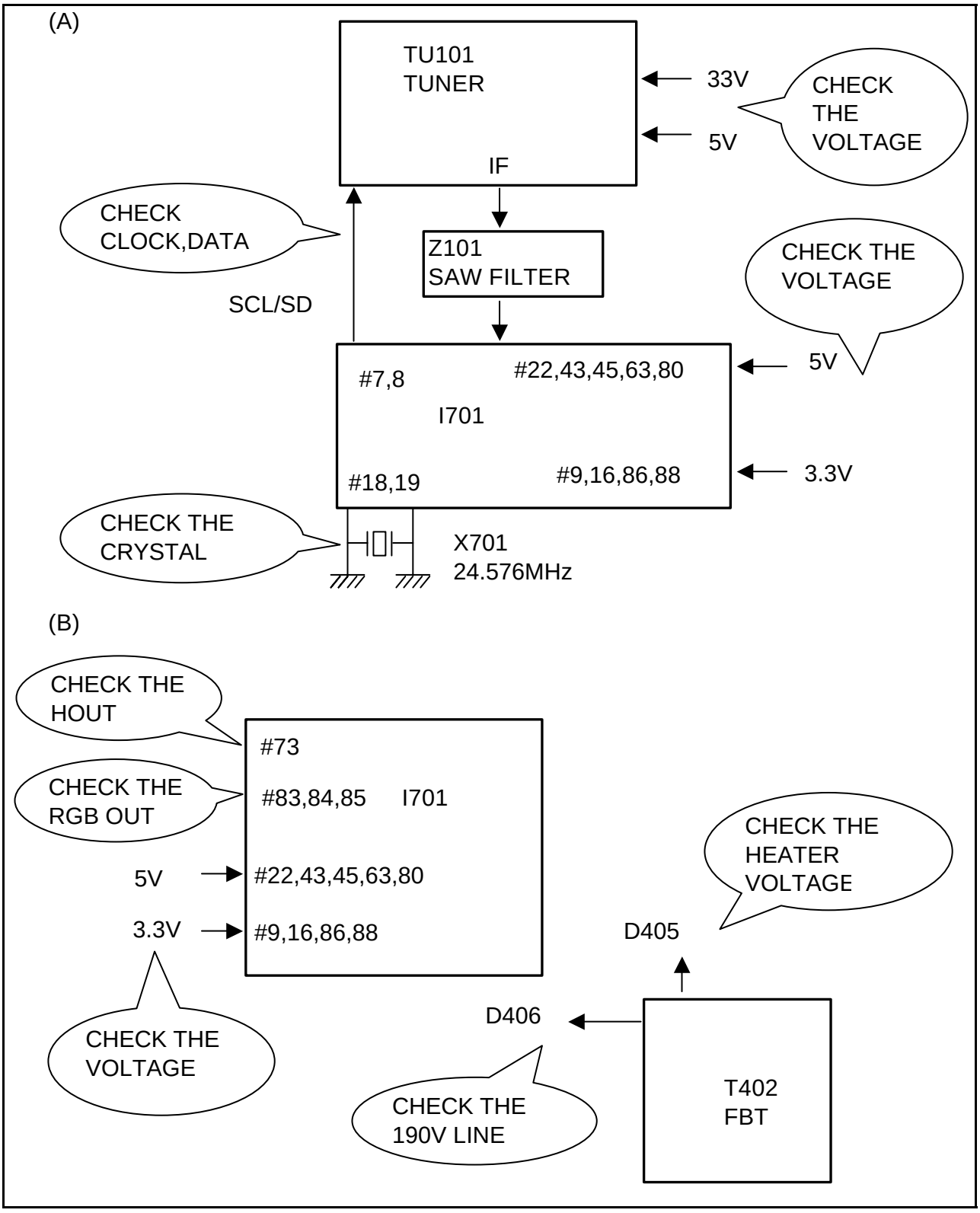


1. NO POWER


CHECK VOLTAGE
+3.3V
+133.5V
STBY+5V
CHECK VOLTAGE
+13V
+5V
CHECK POWER ON:HIGH POWER OFF:LOW
AUDIO B+ 13V 1.8A
+7.0V 580mA
+5.0V 53mA
+45V 30mA
300mA
+133.5V 670mA
OCP Block OPTION
I805 KIA78R05PI
I803 LD1117AV33
T801 TSM-4445B7XX:110V TSM-4445B8XX:220V
I801 STR-W6754 : 220V STR-W6735 : 110V
CHECK F801(5A)
CHECK R801(10 W 1 OHM)
CHECK WAVEFORM

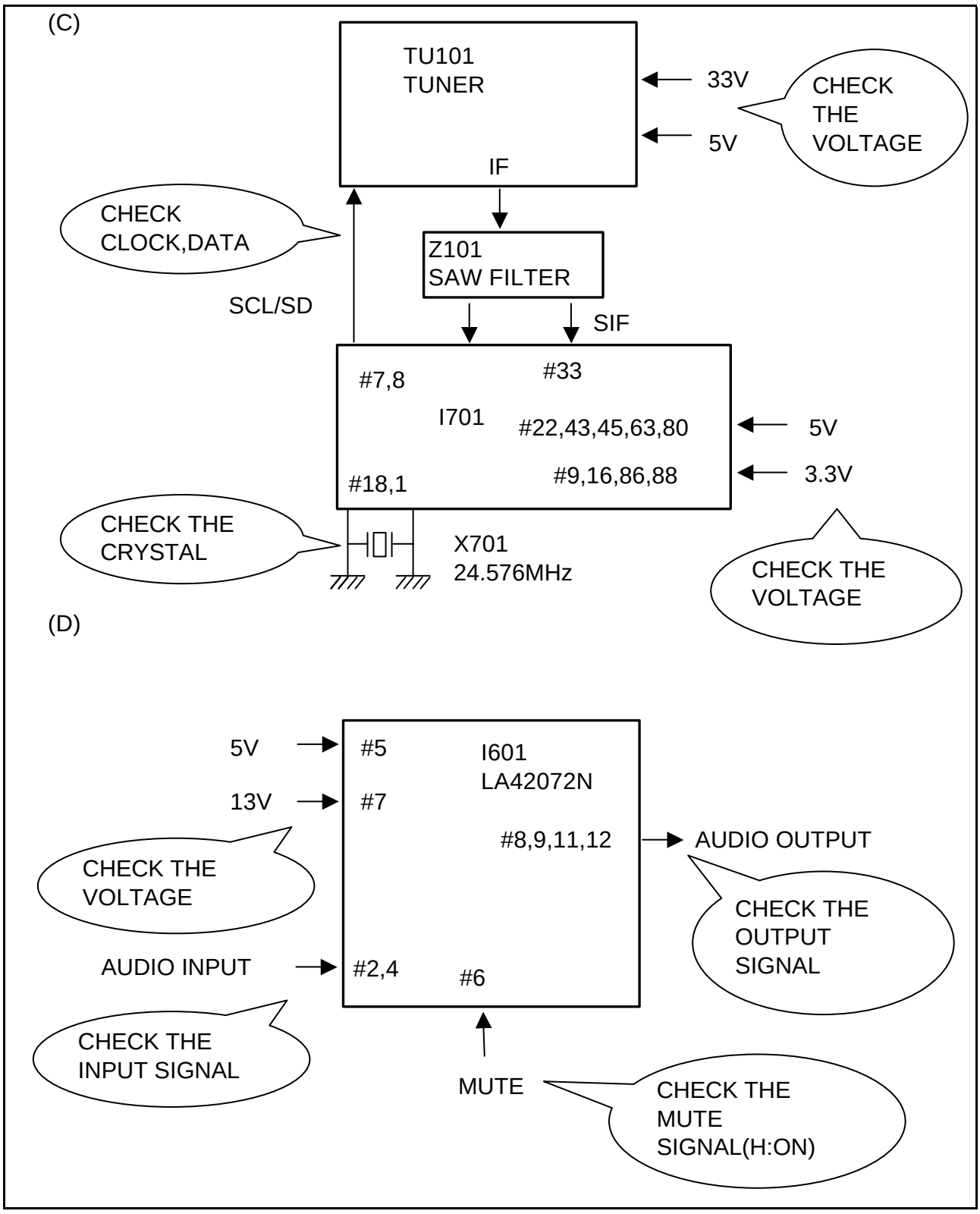
2. NO PICTURE

Check The Waveform of TU101 IF PIN	NG : Go To The Figure (A)
	OK : Go To The Figure (B)



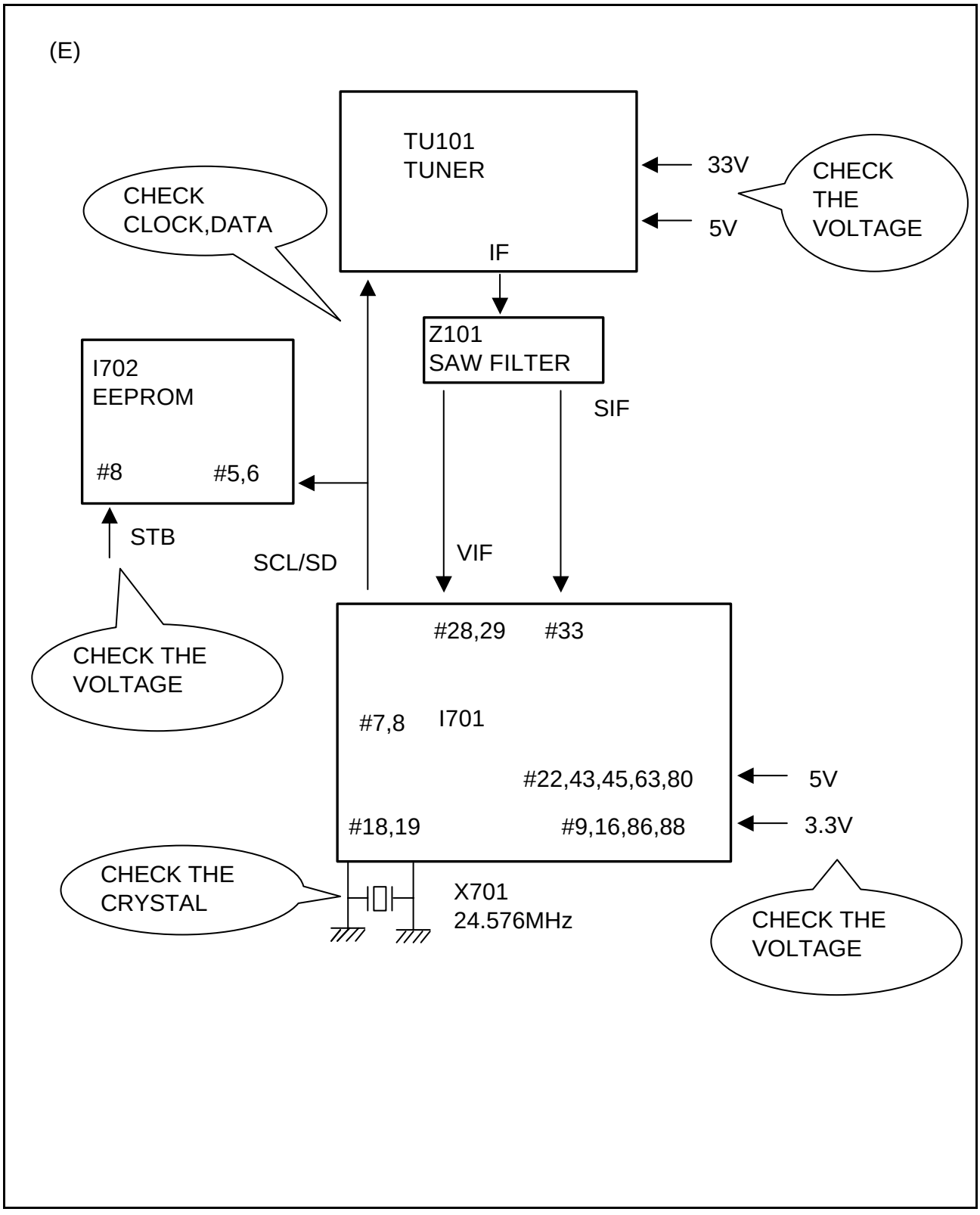
3. NO SOUND

Check The Output Signal of I701 #57,58	NG : Go To The Figure (C)
	OK : Go To The Figure (D)

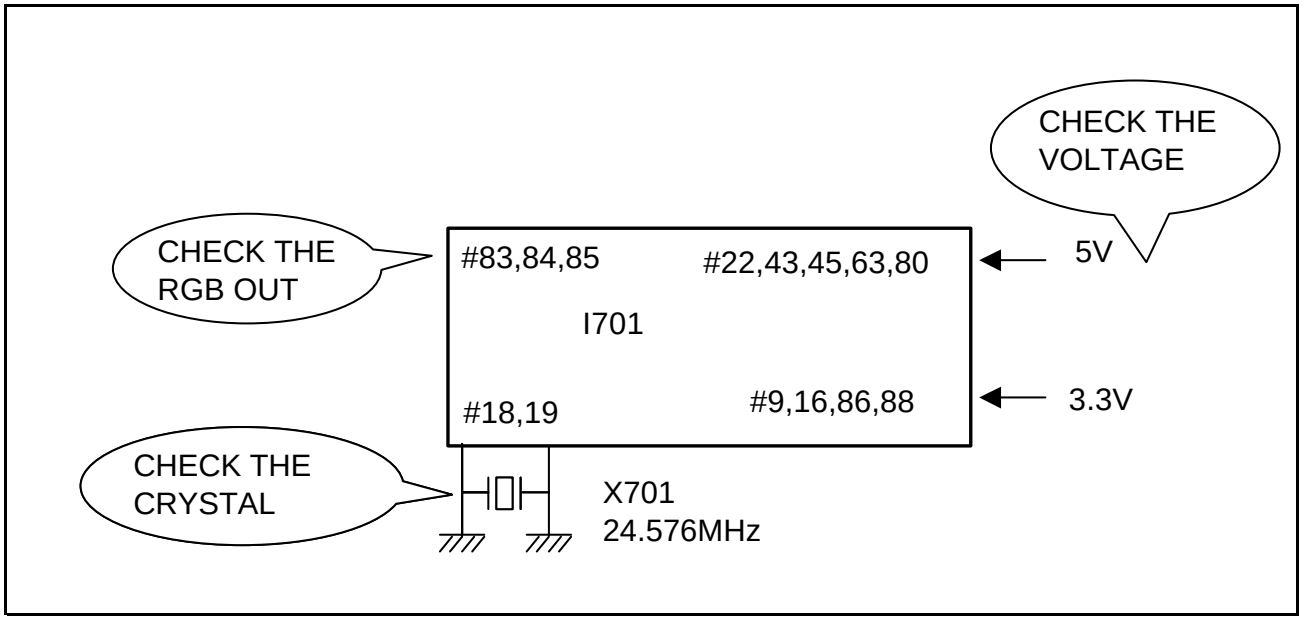


4. CH DON'T MEMORY or SKIP

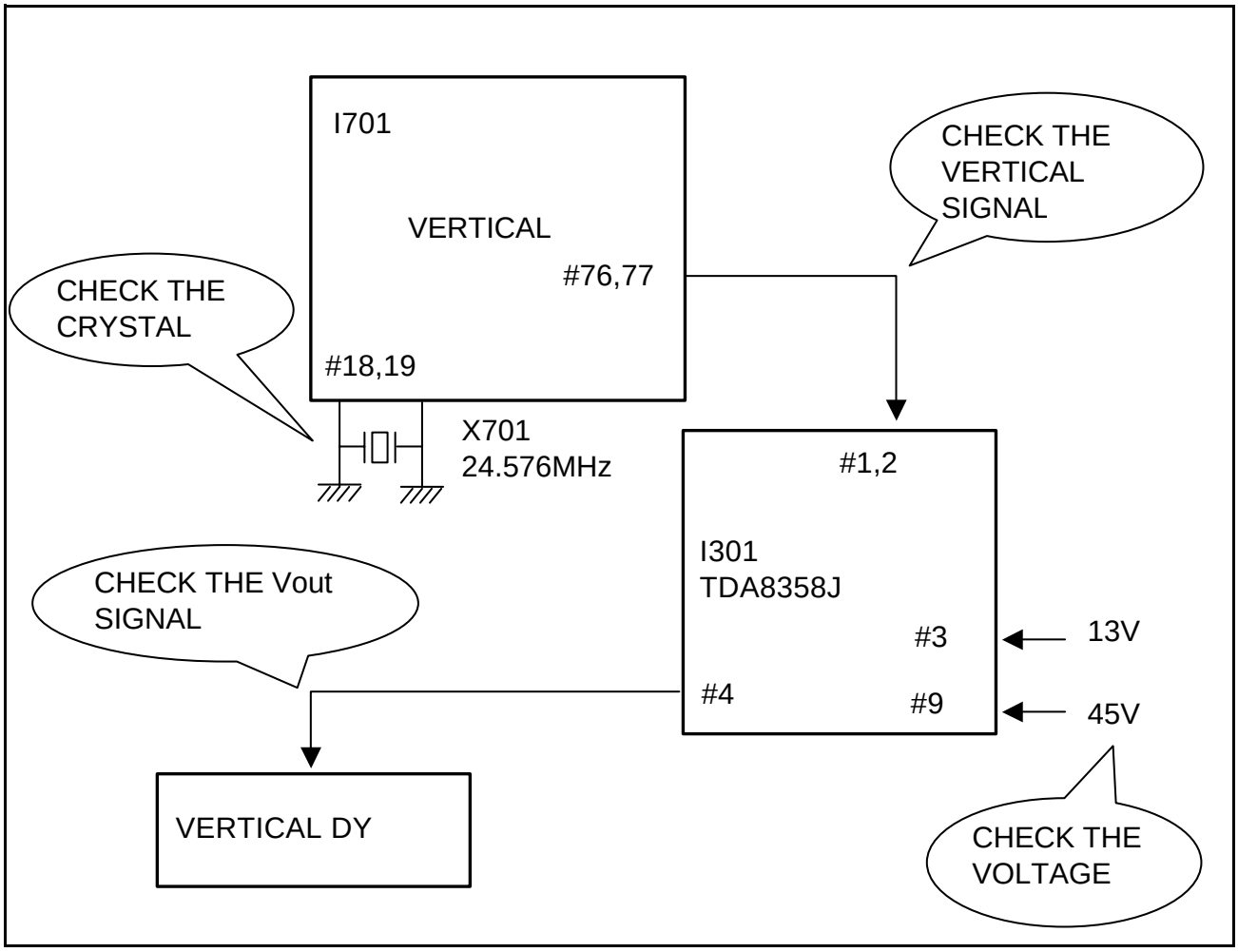
Check The Iutput Signal Conditions	NG : Loss of Signal or Weak Signal
	OK : Go To The Figure (E)



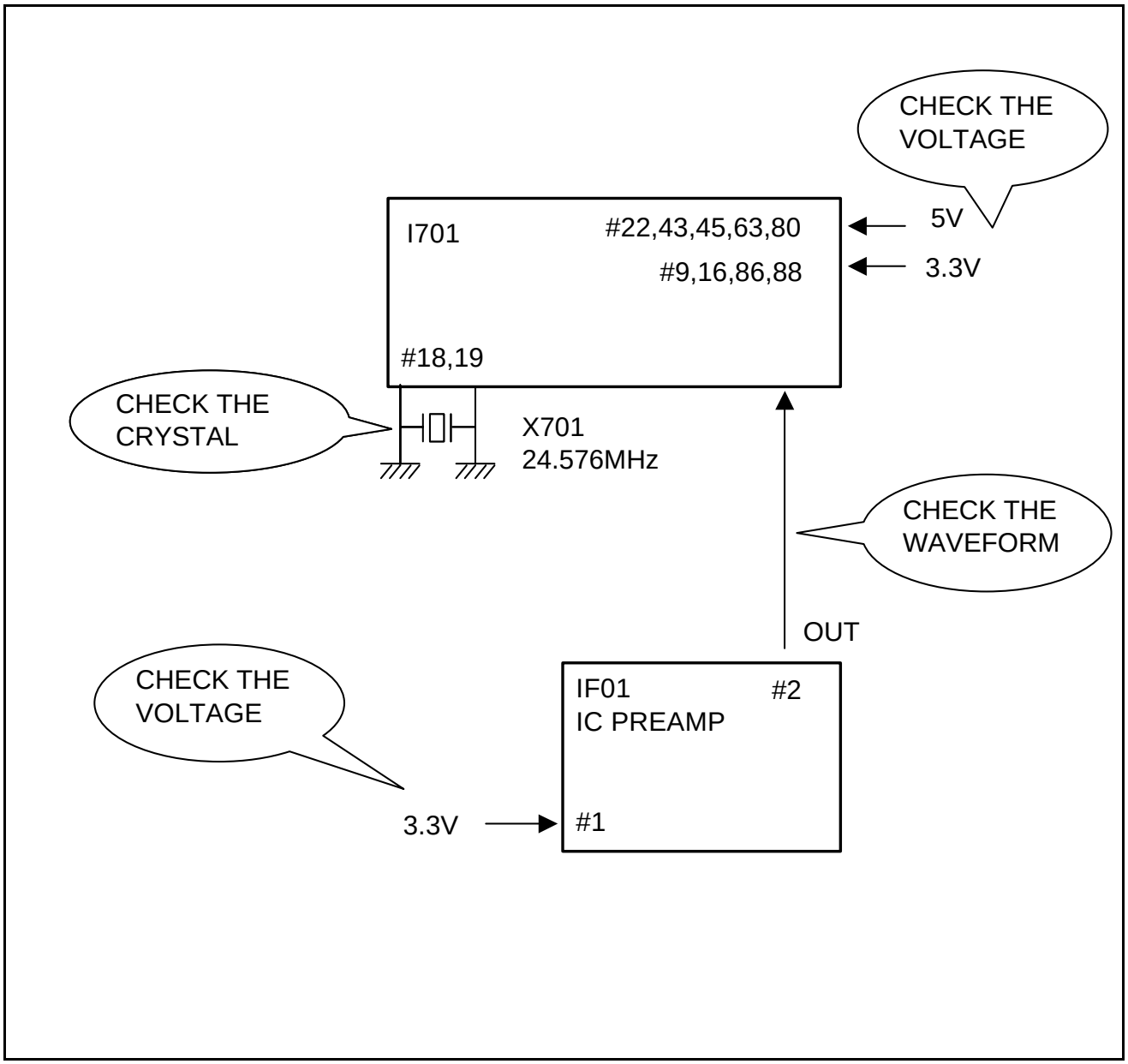
5. NO COLOR



6. NO VERTICAL DEFLECTION



7. REMOTE CONTROL DOES NOT OPERATE



ELECTRICAL PARTS LIST

★Caution

: In this Manual, some parts can be changed for improving. their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center(http://svc.dwe.co.kr)

**This BOM is based on DTQ-29U1SCV

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
1	ZZ100	48B5748C04	TRANSMITTER REMOCON	R-48C04 (AAA)	
2	ZZ110	PTACPWK009	ACCESSORY AS	DTQ-29U4SC	
3	ZZ120	PTBCSHK016	COVER BACK AS	DTQ-29U1SC	
4	M211	4852163100	COVER BACK	FR HIPS GY 29U1	
5	M781	4857817630	CLOTH BLACK	FELT 400X20X0.7	
6	M782	4857817612	CLOTH BLACK	FELT 250X20X0.7	
7	ZZ131	48519A4210	CRT GROUND NET	2901H-1015-2P	
8	ZZ132	58G0000143	COIL DEGAUSSING	DC-29S1	
9	ZZ140	PTCACAK142	CABINET AS	DTQ-29U1SCV	
10	M201C	4856215404	WASHER RUBBER	CR T4.0	
11	M201E	4856816300	CLAMP WIRE	NYLON 6 (V0)	
12	V901	4859643460	CRT	A68ELA021X103 (CHN)	
13	ZZ200	PTFMSJK016	MASK FRONT AS	DTQ-29U1SC	
14	M191	4851948400	BUTTON CTRL	4955100+5549200 29U1	
15	M191A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN	
16	M201	4852083500	MASK FRONT	FR HIPS GY 29U1	
17	M481	4854864100	BUTTON POWER	FR HIPS GY 29U1	
18	M481A	4856716000	SPRING	SWPA PIE0.5	
19	M561	4855617400	MARK BRAND	CU AU+ABS BK	
20	M781	4857818703	CLOTH BLACK	FELT 300X15XT1.0	
21	ZZ201	PTSPPWK129	SPEAKER AS	DTQ-29U1V	
22	PA601	4850704S32	CONNECTOR	YH025-04+YRT205+ULW=900	
23	SP601	4858310810	SPEAKER	SP-58126F01	
24	SP602	4858310810	SPEAKER	SP-58126F01	
25	JA02	4859105450	JACK PIN BOARD	YSC03P-4120-9S	
26	M111	4851114003	PANEL AV ASSY	2326802+5934301	
27	M684	4856812001	TIE CABLE	NYLON66 DA100	
28	P201A	4850705N21	CONNECTOR	YH025-05+YBNH250+USW=400	
29	10	2TM14006LB	TAPE MASKING	3M #232 6.0X2000M	
30	20	2TM10006LB	TAPE MASKING	3M #232-MAP-C 6.2X2000M	
31	A001	4859802917	PCB JACK	79.05X27.3(197X246/14)C1B	
32	CC608	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
33	CCS07	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
34	RC636	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
35	RCS33	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
36	ZZ290	PTMPMSK142	PCB MAIN MANUAL AS	DTQ-29U1SCV	
37	C118	CMXL1J154J	C MYLAR	63V MEU 0.15MF J	
38	C401	CEYD1H689W	C ELECTRO	50V RHD 6.8MF (16X35.5)	
39	C406	CMYF2G394J	C MYLAR	400V MPP 0.39MF J	
40	C407	CMYH3C722J	C MYLAR	1.6KV BUP 7200PF J	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
41	C408	CMYH3C702J	C MYLAR	1.6KV BUP 7000PF J	
42	C409	CMYE2G273J	C MYLAR	400V PU 0.027MF J	
43	C801	CL1UC3474M	C LINE ACROSS	0.47MF 1J(UCVSNDF/SV)+Q/O	
44	C802	CL1UC3474M	C LINE ACROSS	0.47MF 1J(UCVSNDF/SV)+Q/O	
45	C806	CEYD2D331D	C ELECTRO	200V FHS 330MF (22X30)	
46	C819	CEYF1E332V	C ELECTRO	25V RSS 3300MF (16X31.5)	
47	CS803	CH1BFE222M	C CERA AC	U/C/V AC400V 2200PF	
48	CS804	CH1BFE222M	C CERA AC	U/C/V AC400V 2200PF	
49	D402	DDGP30L—-	DIODE	DGP30L	
50	D403	DRGP30J—-	DIODE	RGP30J DO-201AD 600V 3A	
51	D801	D1N5406G—	DIODE	IN5406G	
52	D802	D1N5406G—	DIODE	IN5406G	
53	D803	D1N5406G—	DIODE	IN5406G	
54	D804	D1N5406G—	DIODE	IN5406G	
55	D809	DRGP30J—-	DIODE	RGP30J DO-201AD 600V 3A	
56	D813	DSR306E20-	DIODE	SR306E20	
57	DL701	DLH2PR5MH3	LED HOLDER AS	LH-2P-R-5M-H3	
58	I301	PTA2SW8227	HEAT SINK ASS`Y	1TDA8358J- + 7174301011	
59	00001	1TDA8358J-	IC VERTICAL	TDA8358J	
60	0000A	4857028227	HEAT SINK	AL EX BK	
61	0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
62	I601	PTI2SW8200	HEAT SINK ASS'Y	1LA42072N- + 7174300811	
63	00001	1LA42072N-	IC AUDIO AMP	LA42072N	
64	0000A	4857028200	HEAT SINK	AL EX BK	
65	0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN	
66	I701	1DA12001PQ	IC MICOM FLASH	TDA12001PQ	
67	I702	124LC16B1B	IC MEMORY	24LC16B1B	
68	I801	PTB2SW4401	HEAT SINK ASS`Y	1STRW6735- + 7174300811	
69	00001	1STRW6735-	IC POWER	STR-W6735	
70	0000A	4857024401	HEAT SINK	AL EX	
71	0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN	
72	I802	1LTV817C—	IC PHOTO COUPLER	LTV-817C	
73	I803	PTUASW6900	HEAT SINK ASS'Y AS	1LD1117V33 + 7174300811	
74	00001	1LD1117V33	IC REGULATOR	LD1117AV33 3.3V 2% TO-220	
75	0000A	4857026900	HEAT SINK	AL EX	
76	0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN	
77	I805	1K78R05—-	IC REGULATOR	KIA78R05API	
78	IF01	1346VF6—-	IC PREAMP	346VF6	
79	JP501	4859111550	JACK PIN BOARD	YPJ501B	
80	JP502	4859106440	JACK S-VHS	PH-SJ-9503	
81	JP503	4859107050	JACK PIN BOARD	PH-JB-9601 (PH06P-4120-C)	
82	L401	58C7070085	COIL CHOKE	TLN-3062A	
83	L402	58H0000033	COIL H-LINEARITY	TRL-2532	
84	L801	5PDLF3055L	FILTER LINE	DLF-3055L	
85	L807	58C0000090	COIL CHOKE	L-45S	

ELECTRICAL PARTS LIST

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
86	M681	4853747800	RETA PCB	NYLON 66	
87	M682	4853747800	RETA PCB	NYLON 66	
88	M683	4853747800	RETA PCB	NYLON 66	
89	PA906	4850708S03	CONNECTOR	YH025-08+YST025+ULW=500	
90	PW801	4859907810	CORD POWER AS	ME301P+TER=2100	
91	Q401	TKTC3229—	TR	KTC3229	
92	Q402	PTH2SW7609	HEAT SINK ASS`Y	T2SD2578— + 7174301011	
93	00001	T2SD2578—	TR HORI	2SD2578	
94	0000A	4857027609	HEAT SINK	AL EX	
95	0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
96	R617	RF02Y338K-	R FUSIBLE	2W 0.33 OHM K	
97	R801	RX10T109JS	R CEMENT	10W 1 OHM J TRIPOD SMALL	
98	R837	RM02Y158J-	R METAL FLAT	2W 0.15 OHM J	
99	RY801	DDB3R0M140	POSISTOR	ECPBD3R0M140	
100	SW707	5S50101035	SW TACT	KPT-1112 1C-1P	
101	T401	5TD0000018	TRANS DRIVE	THD-120	
102	T402	50H0000287	FBT	BSC29-0172D	
103	T801	50M4445B7-	TRANS SMPS	TSM-4445B7	
104	TU101	4859726730	TUNER VARACTOR	TAEC-H012F(A)	
105	X701	5XJ24R576E	CRYSTAL QUARTZ	HC-49/S 24.576MHZ 30PPM	
106	Y801	5SC0101339	SW RELAY	SDT-S-105LMR	
107	Z101	5PTSB6221C	FILTER SAW	TSB6221C	
108	Z801	DSVC471D14	VARISTOR	SVC471D14A (BULK)	
109	C404	CEXA2D229E	C ELECTRO	200V RUL 2.2MF (10X16) TP	
110	C410	CMXB2G472J	C MYLAR	400V EU 4700PF J (TP)	
111	C411	CEXF2E100V	C ELECTRO	250V RSS 10MF (10X20) TP	
112	C412	CCXB3D681K	C CERA	2KV B 680PF K (TAPPING)	
113	C417	CEXF1E102V	C ELECTRO	25V RSS 1000MF (13X20) TP	
114	C419	CEXF2A470V	C ELECTRO	100V RSS 47MF (10X16) TP	
115	C613	CEXF1E102V	C ELECTRO	25V RSS 1000MF (13X20) TP	
116	C804	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	
117	C805	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	
118	C807	CBXB3D102K	C CERA SEMI	2KV BL(N) 1000PF K (T)	
119	C814	CCXB3D221K	C CERA	2KV B 220PF K (TAPPING)	
120	C815	CBXB3D471K	C CERA SEMI	2KV BL(N) 470PF K (T)	
121	C816	CEXF2C101C	C ELECTRO	160V RUS 100MF (16X25) TP	
122	C817	CEXF2A470V	C ELECTRO	100V RSS 47MF (10X16) TP	
123	C818	CBXB3D471K	C CERA SEMI	2KV BL(N) 470PF K (T)	
124	C820	CEXF2C101C	C ELECTRO	160V RUS 100MF (16X25) TP	
125	C835	CEXF1C102V	C ELECTRO	16V RSS 1000MF (10X20) TP	
126	C842	CBXB3D471K	C CERA SEMI	2KV BL(N) 470PF K (T)	
127	C852	CEXF1E102V	C ELECTRO	25V RSS 1000MF (13X20) TP	
128	P601	485923172S	CONN WAFER	YW025-04 (STICK)	
129	P705	485923172S	CONN WAFER	YW025-04 (STICK)	
130	P902	485923172S	CONN WAFER	YW025-04 (STICK)	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
131	PA907	485923182S	CONN WAFER	YW025-05 (STICK)	
132	R106	RS02Z512JS	R M-OXIDE FILM	2W 5.1K OHM J SMALL	
133	R305	RS02Z129JS	R M-OXIDE FILM	2W 1.2 OHM J SMALL	
134	R401	RS02Z100JS	R M-OXIDE FILM	2W 10 OHM J SMALL	
135	R402	RS02Z121JS	R M-OXIDE FILM	2W 120 OHM J SMALL	
136	R407	RS02Z223JS	R M-OXIDE FILM	2W 22K OHM J SMALL	
137	R408	RS02Z102JS	R M-OXIDE FILM	2W 1K OHM J SMALL	
138	R409	RS01Z103J-	R M-OXIDE FILM	1W 10K OHM J (TAPPING)	
139	R411	RS01Z229J-	R M-OXIDE FILM	1W 2.2 OHM J (TAPPING)	
140	R414	RF01Z828JA	R FUSIBLE	1W 0.82 OHM J A CURVE	
141	R416	RF01Z338K-	R FUSIBLE	1W 0.33 OHM K (TAPPING)	
142	R417	RS01Z229J-	R M-OXIDE FILM	1W 2.2 OHM J (TAPPING)	
143	R802	RS02Z913JS	R M-OXIDE FILM	2W 91K OHM J SMALL	
144	R829	RS02Z309JS	R M-OXIDE FILM	2W 3 OHM J SMALL	
145	R836	RS02Z109JS	R M-OXIDE FILM	2W 1 OHM J SMALL	
146	C101	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)	
147	C102	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
148	C103	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)	
149	C104	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP	
150	C105	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)	
151	C106	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
152	C112	CMXM2A682J	C MYLAR	100V 6800PF J (TP)	
153	C114	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
154	C115	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)	
155	C116	CCXF1H223Z	C CERA	50V F 0.022MF Z (TAPPING)	
156	C117	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
157	C119	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)	
158	C122	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
159	C123	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
160	C124	CMXM2A473J	C MYLAR	100V 0.047MF J (TP)	
161	C125	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
162	C127	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
163	C128	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
164	C130	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
165	C131	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)	
166	C201	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
167	C202	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
168	C204	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
169	C301	CMXM2A473J	C MYLAR	100V 0.047MF J (TP)	
170	C305	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
171	C306	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
172	C307	CCXF1H473Z	C CERA	50V F 0.047MF Z (TAPPING)	
173	C308	CCXF1H473Z	C CERA	50V F 0.047MF Z (TAPPING)	
174	C402	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
175	C403	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
176	C405	CCXB2H561K	C CERA	500V B 560PF K (TAPPING)	
177	C413	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP	
178	C414	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)	
179	C416	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)	
180	C418	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)	
181	C420	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)	
182	C422	CMXM2A473J	C MYLAR	100V 0.047MF J (TP)	
183	C423	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
184	C601	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
185	C602	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)	
186	C603	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)	
187	C604	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
188	C605	CMXM2A682J	C MYLAR	100V 6800PF J (TP)	
189	C606	CMXM2A682J	C MYLAR	100V 6800PF J (TP)	
190	C607	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
191	C608	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
192	C609	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
193	C610	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
194	C614	CEXF1C470V	C ELECTRO	16V RSS 47MF (5X11) TP	
195	C619	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)	
196	C620	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
197	C622	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP	
198	C623	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP	
199	C624	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
200	C625	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
201	C626	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
202	C627	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
203	C628	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP	
204	C629	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP	
205	C701	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
206	C704	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
207	C705	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
208	C707	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
209	C713	CEXF1C470V	C ELECTRO	16V RSS 47MF (5X11) TP	
210	C716	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
211	C721	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
212	C722	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)	
213	C723	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
214	C724	CXCH1H809D	C CERA	50V CH 8PF D (TAPPING)	
215	C725	CXCH1H809D	C CERA	50V CH 8PF D (TAPPING)	
216	C726	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
217	C727	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
218	C729	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
219	C730	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
220	C731	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
221	C732	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)	
222	C734	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)	
223	C735	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
224	C737	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)	
225	C740	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
226	C809	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
227	C810	CCXF1H223Z	C CERA	50V F 0.022MF Z (TAPPING)	
228	C811	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
229	C812	CCXB1H821K	C CERA	50V B 820PF K (TAPPING)	
230	C813	CCXB1H471K	C CERA	50V B 470PF K (TAPPING)	
231	C821	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
232	C824	CMXL1J154J	C MYLAR	63V MEU 0.15MF J	
233	C826	CEXF1E221V	C ELECTRO	25V RSS 220MF (8X11.5) TP	
234	C827	CEXF1C331V	C ELECTRO	16V RSS 330MF (8X11.5) TP	
235	C828	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
236	C834	CMXL1J104J	C MYLAR	63V MEU 0.1MF J	
237	C836	CEXF1E221V	C ELECTRO	25V RSS 220MF (8X11.5) TP	
238	C837	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP	
239	CA07	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)	
240	CA08	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)	
241	CV12	CEXF1C470V	C ELECTRO	16V RSS 47MF (5X11) TP	
242	F801	5FWPS5022L	FUSE	WIDE TL 250V 5A CASE	
243	I804	1K1A431B—	IC REGULATOR(SHUNT)	KIA431B 2.495V 0.5% TO-92	
244	L808	58C0000142	COIL CHOKE	ELC 0809 940K	
245	Q101	TKTC3198Y-	TR	KTC3198Y	
246	Q201	TKTA1266Y-	TR	KTA1266Y (TP)	
247	Q602	TKTA1266Y-	TR	KTA1266Y (TP)	
248	Q704	TKTC3198Y-	TR	KTC3198Y	
249	Q705	TKTA1270Y-	TR	KTA1270Y (TP)	
250	Q706	TKTC3198Y-	TR	KTC3198Y	
251	Q707	TKTA1270Y-	TR	KTA1270Y (TP)	
252	Q708	TKTC3198Y-	TR	KTC3198Y	
253	Q801	TKTC3203Y-	TR	KTC3203-Y	
254	Q804	TKTC3198Y-	TR	KTC3198Y	
255	Q805	TKTC3198Y-	TR	KTC3198Y	
256	QV01	TKTC3198Y-	TR	KTC3198Y	
257	QV02	TKTA1266Y-	TR	KTA1266Y (TP)	
258	R302	RN02B181JS	R METAL FILM	2W 180 OHM J SMALL	
259	R403	RN01B472JS	R METAL FILM	1W 4.7K OHM J SMALL	
260	SW701	5S50101090	SW TACT	THVH472GCA	
261	SW702	5S50101090	SW TACT	THVH472GCA	
262	SW703	5S50101090	SW TACT	THVH472GCA	
263	SW704	5S50101090	SW TACT	THVH472GCA	
264	SW705	5S50101090	SW TACT	THVH472GCA	
265	SW706	5S50101090	SW TACT	THVH472GCA	

ELECTRICAL PARTS LIST

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
266	A001	4859818691	PCB MAIN	330X246 D1B	
267	C107	CZSL1H470J	C CERA	50V SL 47PF J (AXIAL)	
268	C108	CZSL1H470J	C CERA	50V SL 47PF J (AXIAL)	
269	C109	CCZF1H103Z	C CERA	50V F 0.01MF Z	
270	C110	CCZB1H222K	C CERA	50V B 2200PF K AXIAL	
271	C111	CCZB1H222K	C CERA	50V B 2200PF K AXIAL	
272	C126	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
273	C129	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
274	C203	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
275	C205	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
276	C206	CCZB1H472K	C CERA	HIKB 50V 4700PF K AXIAL	
277	C612	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
278	C702	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
279	C703	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
280	C706	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
281	C712	CCZB1H561K	C CERA	50V B 560PF K	
282	C714	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
283	C715	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
284	C717	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
285	C719	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
286	C720	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
287	C728	CCZF1H103Z	C CERA	50V F 0.01MF Z	
288	C733	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
289	C736	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
290	C738	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
291	C739	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
292	CA03	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
293	CA04	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
294	CA05	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
295	CA06	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
296	CV13	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
297	CV14	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
298	CV15	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
299	D101	DUZ33B——	DIODE ZENER	UZ-33B	
300	D301	D1N4937G—	DIODE	1N4937G (TAPPING)	
301	D401	D1N4937G—	DIODE	1N4937G (TAPPING)	
302	D404	DUZ9R1BM—	DIODE ZENER	UZ-9.1BM	
303	D405	D1N4937G—	DIODE	1N4937G (TAPPING)	
304	D406	D1N4937G—	DIODE	1N4937G (TAPPING)	
305	D407	DRGP15J—-	DIODE	RGP15J DO-204AC 600V 1.5A	
306	D408	DRGP15J—-	DIODE	RGP15J DO-204AC 600V 1.5A	
307	D602	D1N4148—-	DIODE	1N4148 (TAPPING)	
308	D701	DUZ3R9B—-	DIODE ZENER	UZ-3.9B	
309	D702	D1N4148—-	DIODE	1N4148 (TAPPING)	
310	D703	D1N4148—-	DIODE	1N4148 (TAPPING)	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
311	D706	DUZ3R3B—-	DIODE ZENER	UZ-3.3B	
312	D805	D1N4937G—	DIODE	1N4937G (TAPPING)	
313	D806	D1N4937G—	DIODE	1N4937G (TAPPING)	
314	D807	D1N4937G—	DIODE	1N4937G (TAPPING)	
315	D808	DMTZJ6R2C-	DIODE ZENER	MTZJ 6.2C	
316	D810	D1N4937G—	DIODE	1N4937G (TAPPING)	
317	D812	DRGP15J—-	DIODE	RGP15J DO-204AC 600V 1.5A	
318	D814	DUZ4R3B—-	DIODE ZENER	UZ-4R3B	
319	D815	D1N4148—-	DIODE	1N4148 (TAPPING)	
320	DV02	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
321	DV03	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
322	DV05	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
323	DV06	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
324	L101	5CPZ470K04	COIL PEAKING	47UH 10.5MM K (LAL04TB)	
325	L103	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
326	L104	5CPZ479K04	COIL PEAKING	4.7UH K (AXIAL 10.5MM)	
327	L201	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
328	L301	5MC0000100	COIL BEAD	HC-3550	
329	L302	5MC0000100	COIL BEAD	HC-3550	
330	L403	5MC0000100	COIL BEAD	HC-3550	
331	L701	5CPZ479K04	COIL PEAKING	4.7UH K (AXIAL 10.5MM)	
332	L702	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
333	L703	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
334	L704	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
335	L705	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
336	L706	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
337	L707	5CPZ479K04	COIL PEAKING	4.7UH K (AXIAL 10.5MM)	
338	L709	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
339	L714	5CPZ479K02	COIL PEAKING	4.7UH K (AXIAL 3.5MM)	
340	L803	5MC0000100	COIL BEAD	HC-3550	
341	L804	5MC0000100	COIL BEAD	HC-3550	
342	L805	5MC0000100	COIL BEAD	HC-3550	
343	L806	5MC0000100	COIL BEAD	HC-3550	
344	R101	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
345	R102	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
346	R103	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
347	R104	RD-AZ100J-	R CARBON FILM	1/6 10 OHM J	
348	R105	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
349	R107	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
350	R108	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
351	R111	RD-AZ181J-	R CARBON FILM	1/6 180 OHM J	
352	R112	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
353	R113	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
354	R114	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
355	R119	RD-AZ393J-	R CARBON FILM	1/6 39K OHM J	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
356	R121	RD-AZ183J-	R CARBON FILM	1/6 18K OHM J	
357	R201	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
358	R203	RN-AZ1801F	R METAL FILM	1/6 1.8K OHM F	
359	R204	RD-4Z222J-	R CARBON FILM	1/4 2.2K OHM J	
360	R213	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
361	R301	RD-4Z159J-	R CARBON FILM	1/4 1.5 OHM J	
362	R303	RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J	
363	R304	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J	
364	R306	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
365	R307	RN-AZ2201F	R METAL FILM	1/6 2.2K OHM F	
366	R308	RD-4Z514J-	R CARBON FILM	1/4 510K OHM J	
367	R310	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J	
368	R311	RD-4Z563J-	R CARBON FILM	1/4 56K OHM J	
369	R312	RN-AZ2201F	R METAL FILM	1/6 2.2K OHM F	
370	R313	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
371	R314	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
372	R404	RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J	
373	R405	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
374	R406	RD-4Z220J-	R CARBON FILM	1/4 22 OHM J	
375	R410	RN-AZ9101F	R METAL FILM	1/6 9.1K OHM F	
376	R412	RN-AZ1202F	R METAL FILM	1/6 12K OHM F	
377	R413	RD-4Z470J-	R CARBON FILM	1/4 47 OHM J	
378	R418	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J	
379	R601	RD-AZ622J-	R CARBON FILM	1/6 6.2K OHM J	
380	R602	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
381	R604	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J	
382	R605	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
383	R606	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J	
384	R607	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
385	R609	RD-AZ202J-	R CARBON FILM	1/6 2K OHM J	
386	R610	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J	
387	R612	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J	
388	R613	RD-4Z229J-	R CARBON FILM	1/4 2.2 OHM J	
389	R614	RD-4Z229J-	R CARBON FILM	1/4 2.2 OHM J	
390	R615	RD-4Z229J-	R CARBON FILM	1/4 2.2 OHM J	
391	R616	RD-4Z229J-	R CARBON FILM	1/4 2.2 OHM J	
392	R620	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
393	R622	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
394	R623	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
395	R624	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
396	R625	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
397	R626	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
398	R627	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
399	R628	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
400	R629	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
401	R630	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
402	R632	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
403	R633	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
404	R634	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
405	R635	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
406	R636	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
407	R701	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
408	R702	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
409	R703	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
410	R704	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
411	R705	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
412	R707	RN-AZ5600F	R METAL FILM	1/6 560 OHM F	
413	R708	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
414	R709	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J	
415	R710	RD-AZ563J-	R CARBON FILM	1/6 56K OHM J	
416	R712	RD-4Z222J-	R CARBON FILM	1/4 2.2K OHM J	
417	R713	RD-AZ470J-	R CARBON FILM	1/6 47 OHM J	
418	R714	RD-AZ123J-	R CARBON FILM	1/6 12K OHM J	
419	R719	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
420	R720	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
421	R722	RD-AZ100J-	R CARBON FILM	1/6 10 OHM J	
422	R723	RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J	
423	R725	RD-AZ513J-	R CARBON FILM	1/6 51K OHM J	
424	R726	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
425	R727	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
426	R729	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
427	R730	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
428	R732	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
429	R733	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
430	R735	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
431	R736	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
432	R742	RD-AZ181J-	R CARBON FILM	1/6 180 OHM J	
433	R743	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J	
434	R744	RD-AZ181J-	R CARBON FILM	1/6 180 OHM J	
435	R745	RD-AZ241J-	R CARBON FILM	1/6 240 OHM J	
436	R746	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
437	R747	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
438	R748	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J	
439	R769	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
440	R770	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J	
441	R772	RD-4Z473J-	R CARBON FILM	1/4 47K OHM J	
442	R773	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
443	R774	RD-4Z473J-	R CARBON FILM	1/4 47K OHM J	
444	R775	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
445	R776	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
446	R777	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J	
447	R778	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
448	R779	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
449	R780	RN-AZ5600F	R METAL FILM	1/6 560 OHM F	
450	R803	RD-4Z479J-	R CARBON FILM	1/4 4.7 OHM J	
451	R804	RD-4Z152J-	R CARBON FILM	1/4 1.5K OHM J	
452	R805	RD-4Z100J-	R CARBON FILM	1/4 10 OHM J	
453	R806	RD-4Z331J-	R CARBON FILM	1/4 330 OHM J	
454	R807	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J	
455	R808	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
456	R809	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
457	R819	RN-4Z1003F	R METAL FILM	1/4 100K OHM F	
458	R820	RN-4Z1502F	R METAL FILM	1/4 15K OHM F	
459	R823	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J	
460	R824	RD-AZ333J-	R CARBON FILM	1/6 33K OHM J	
461	R826	RN-AZ2201F	R METAL FILM	1/6 2.2K OHM F	
462	R827	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J	
463	R830	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
464	R832	RD-AZ752J-	R CARBON FILM	1/6 7.5K OHM J	
465	R833	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
466	R834	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
467	R835	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
468	R873	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J	
469	RA03	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
470	RA04	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
471	RA05	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
472	RA06	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
473	RA07	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
474	RA08	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J	
475	RS801	RC-2Z225KP	R CARBON COMP	1/2 2.2M OHM K	
476	RS821	RC-2Z225KP	R CARBON COMP	1/2 2.2M OHM K	
477	RV01J	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
478	RV02	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
479	RV03	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
480	RV04	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
481	RV05	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
482	RV06	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
483	RV09	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
484	RV10	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
485	RV11	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
486	RV12	RD-4Z220J-	R CARBON FILM	1/4 22 OHM J	
487	RV13	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J	
488	RV14	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
489	RV15	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
490	RV16	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION	REMARK
491	RV17	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
492	ZA03	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
493	ZA04	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
494	ZA05	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
495	ZA07	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
496	ZA08	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
497	ZZ300	PTCPMSK142	PCB CRT MANUAL AS	DTQ-29U1SCV	
498	I901	PTE3SW1100	HEAT SINK ASS'Y	1TDA6107AJ + 7174300811	
499	00001	1TDA6107AJ	IC VIDEO	TDA6107AJF	
500	0000A	4857031100	HEAT SINK	A1050P-H24 T2.0	
501	0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN	
502	P903	4859238620	CONN WAFER	YPW500-02	
503	PA902	4850704S04	CONNECTOR	YH025-04+YST025+ULW=400	
504	SCT1	4859303530	SOCKET CRT	PCS629-03C	
505	C904	CEXF2E479V	C ELECTRO	250V RSS 4.7MF (10X16)TP	
506	C905	CEXF2E479V	C ELECTRO	250V RSS 4.7MF (10X16)TP	
507	C926	CBXB3D102K	C CERA SEMI	2KV BL(N) 1000PF K (T)	
508	P906	485923512S	CONN WAFER	YW025-08 (STICK)	
509	R911	RS02Z151JS	R M-OXIDE FILM	2W 150 0HM J SMALL	
510	R914	RF01Z109J-	R FUSIBLE	1W 1 OHM J (TAPPING)	
511	C902	CCXB1H561K	C CERA	50V B 560PF K (TAPPING)	
512	C903	CMXL2E104K	C MYLAR	250V MEU 0.1MF K	
513	C922	4SG0DX0001	SPARK GAP	SSG-102-A1(1.0KV) TAP	
514	C923	4SG0DX0001	SPARK GAP	SSG-102-A1(1.0KV) TAP	
515	C924	4SG0DX0001	SPARK GAP	SSG-102-A1(1.0KV) TAP	
516	C925	4SG0DX0001	SPARK GAP	SSG-102-A1(1.0KV) TAP	
517	A001	4859830213	PCB CRT	108X61.5(246X246) D1B	
518	D905	D1N4004S—	DIODE	1N4004S	
519	D906	D1N4004S—	DIODE	1N4004S	
520	D907	D1N4004S—	DIODE	1N4004S	
521	D908	DLT2A05G—	DIODE	LT2A05G (TP)	
522	J901	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
523	J902	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
524	R901	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J	
525	R902	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J	
526	R903	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J	
527	R905	RD-4Z101J-	R CARBON FILM	1/4 100 OHM J	
528	R906	RD-4Z101J-	R CARBON FILM	1/4 100 OHM J	
529	R907	RD-4Z101J-	R CARBON FILM	1/4 100 OHM J	
530	R908	RC-2Z102K-	R CARBON COMP	1/2 1K OHM K	
531	R909	RC-2Z102K-	R CARBON COMP	1/2 1K OHM K	
532	R910	RC-2Z102K-	R CARBON COMP	1/2 1K OHM K	
533	R912	RC-2Z105KP	R CARBON COMP	1/2 1M OHM K	
534	R913	RD-2Z102J-	R CARBON FILM	1/2 1K OHM J	

DIFFERENT PARTS LIST

**This BOM is based on DTQ-29U1SCV, it is different parts list in comparison with DTQ-29U1SSFV.

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION
1	00001	1STRW6756-	IC POWER	STR-W6756
2	0000A	4857027602	HEAT SINK	AL EX BK
3	0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN
4	0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN
5	10	2TM14006LB	TAPE MASKING	3M #232 6.0X2000M
6	20	2TM10006LB	TAPE MASKING	3M #232-MAP-C 6.2X2000M
7	AD001	4859000240	ADAPTER	2P15A 300V(D=4.0)
8	C806	CEYD2G331D	C ELECTRO	400V FHS 330MF (30X45)
9	C825	CH1BFE222M	C CERA AC	U/C/V AC400V 2200PF
10	C832	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP
11	C833	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP
12	C837	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP
13	D416	DUZ9R1BM--	DIODE ZENER	UZ-9.1BM
14	D809	DHER308G--	DIODE	HER308G
15	D813	DRGP30J---	DIODE	RGP30J DO-201AD 600V 3A
16	I801	PTE2SW4401	HEAT SINK ASS'Y	1STRW6756- + 7174300811
17	M191	4851948401	BUTTON CTRL	4955101+5549200 29U1
18	M201	4852083501	MASK FRONT	HIPS GY 29U1
19	M211	4852163101	COVER BACK	HIPS GY 29U1
20	M481	4854864101	BUTTON POWER	HIPS GY 29U1
21	PW801	4859900910	CORD POWER AS	KKP-419C+YPT-018=2100
22	Q402	PTP2SW7602	HEAT SINK ASS'Y	T2SD2578-- + 7174300811
23	Q802	TKSA1013Y-	TR	KSA1013Y (TP)
24	R604	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
25	R606	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
26	R810	85801060GY	WIRE COPPER	1/0.6 TIN COATING
27	R811	RD-AZ563J-	R CARBON FILM	1/6 56K OHM J
28	R812	RN-AZ2202F	R METAL FILM	1/6 22K OHM F
29	R813	RD-AZ363J-	R CARBON FILM	1/6 36K OHM J
30	R814	RW02Z398F-	R WIRE WOUND	2W 0.39 OHM F
31	R815	RC-2Z105KP	R CARBON COMP	1/2 1M OHM K
32	R818	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
33	R820	RN-4Z1602F	R METAL FILM	1/4 16.0K OHM F
34	R837	RM02Y228J-	R METAL FLAT	2W 0.22 OHM J
35	R840	RC-2Z565KP	R CARBON COMP	1/2 5.6M OHM K
36	RY801	DDB7R0M290	POSISTOR	ECPBD7R0M290
37	ZZ132	58G0000149	COIL DEGAUSSING	DC-29SF

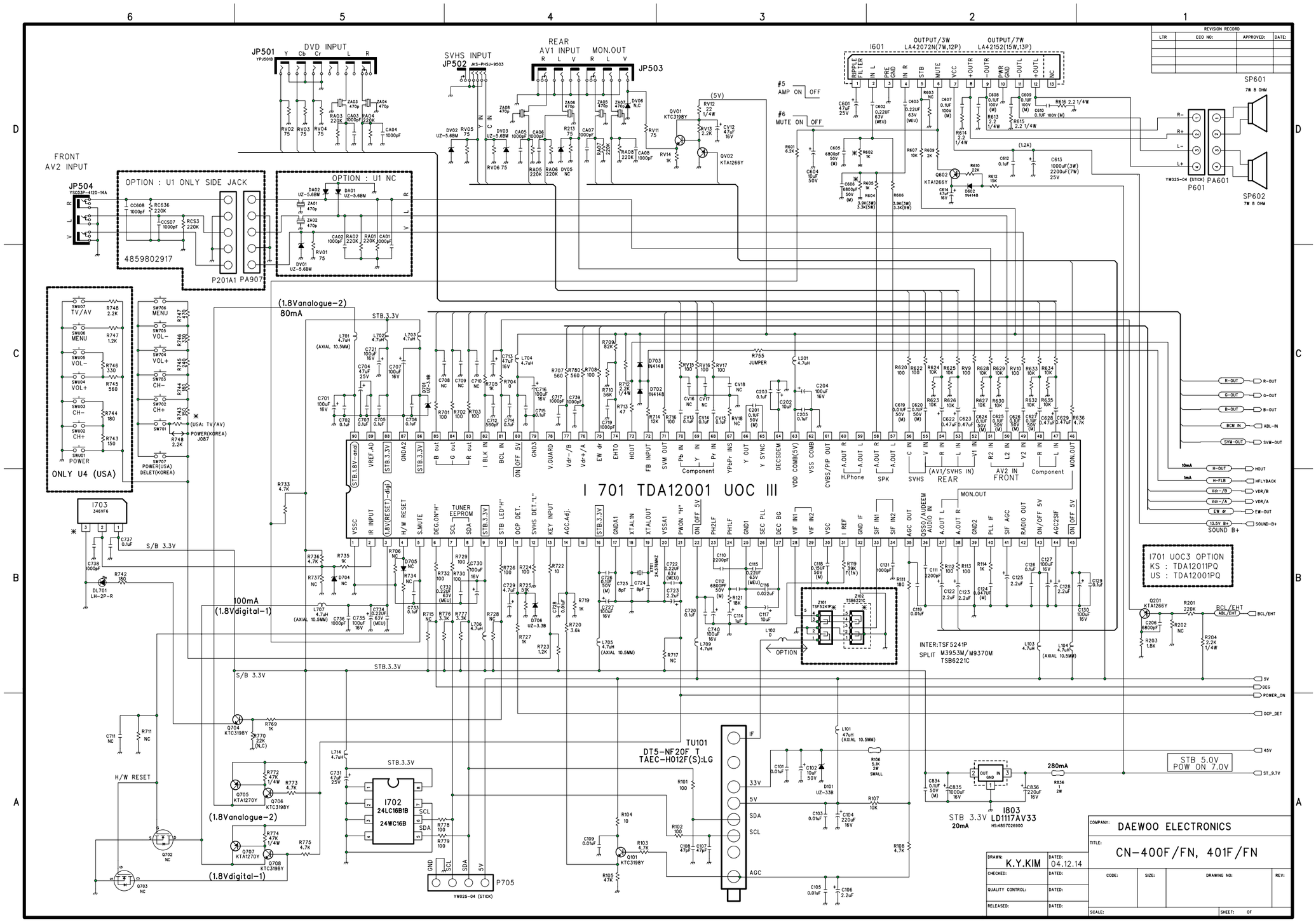
**This BOM is based on DTQ-29U1SCV, it is different parts list in comparison with DTQ-29U5SSFV.

NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION
1	00001	1STRW6756-	IC POWER	STR-W6756
2	0000A	4857027602	HEAT SINK	AL EX BK
3	AD001	4859000240	ADAPTER	2P15A 300V(D=4.0)
4	C806	CEYD2G331D	C ELECTRO	400V FHS 330MF (30X45)
5	C825	CH1BFE222M	C CERA AC	U/C/V AC400V 2200PF
6	C832	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP
7	C833	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP
8	C837	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP
9	D416	DUZ9R1BM--	DIODE ZENER	UZ-9.1BM
10	D809	DHER308G--	DIODE	HER308G
11	D813	DRGP30J---	DIODE	RGP30J DO-201AD 600V 3A
12	I801	PTE2SW4401	HEAT SINK ASS'Y	1STRW6756- + 7174300811
13	M191	4854955501	BUTTON CH	ABS GY 29U5
14	M201	4852084001	MASK FRONT	HIPS GY 29U5
15	M211	4852163101	COVER BACK	HIPS GY 29U1
16	M481	4854864601	BUTTON POWER	HIPS GY 29U5
17	M492	4855549700	DECO SENSOR	PC SMOG 29U5
18	M811	4858101600	PAD	EPS 29U5
19	PW801	4859900910	CORD POWER AS	KKP-419C+YPT-018=2100
20	Q402	PTP2SW7602	HEAT SINK ASS'Y	T2SD2578-- + 7174300811
21	Q802	TKSA1013Y-	TR	KSA1013Y (TP)
22	R604	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
23	R606	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
24	R810	85801060GY	WIRE COPPER	1/0.6 TIN COATING
25	R811	RD-AZ563J-	R CARBON FILM	1/6 56K OHM J
26	R812	RN-AZ2202F	R METAL FILM	1/6 22K OHM F
27	R813	RD-AZ363J-	R CARBON FILM	1/6 36K OHM J
28	R814	RW02Z398F-	R WIRE WOUND	2W 0.39 OHM F
29	R815	RC-2Z105KP	R CARBON COMP	1/2 1M OHM K
30	R818	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
31	R820	RN-4Z1602F	R METAL FILM	1/4 16.0K OHM F
32	R837	RM02Y228J-	R METAL FLAT	2W 0.22 OHM J
33	R840	RC-2Z565KP	R CARBON COMP	1/2 5.6M OHM K
34	RY801	DDB7R0M290	POSISTOR	ECPBD7R0M290
35	ZZ132	58G0000149	COIL DEGAUSSING	DC-29SF

**This BOM is based on DTQ-29U1SCV, it is different parts list in comparison with DTQ-29U4SCV.

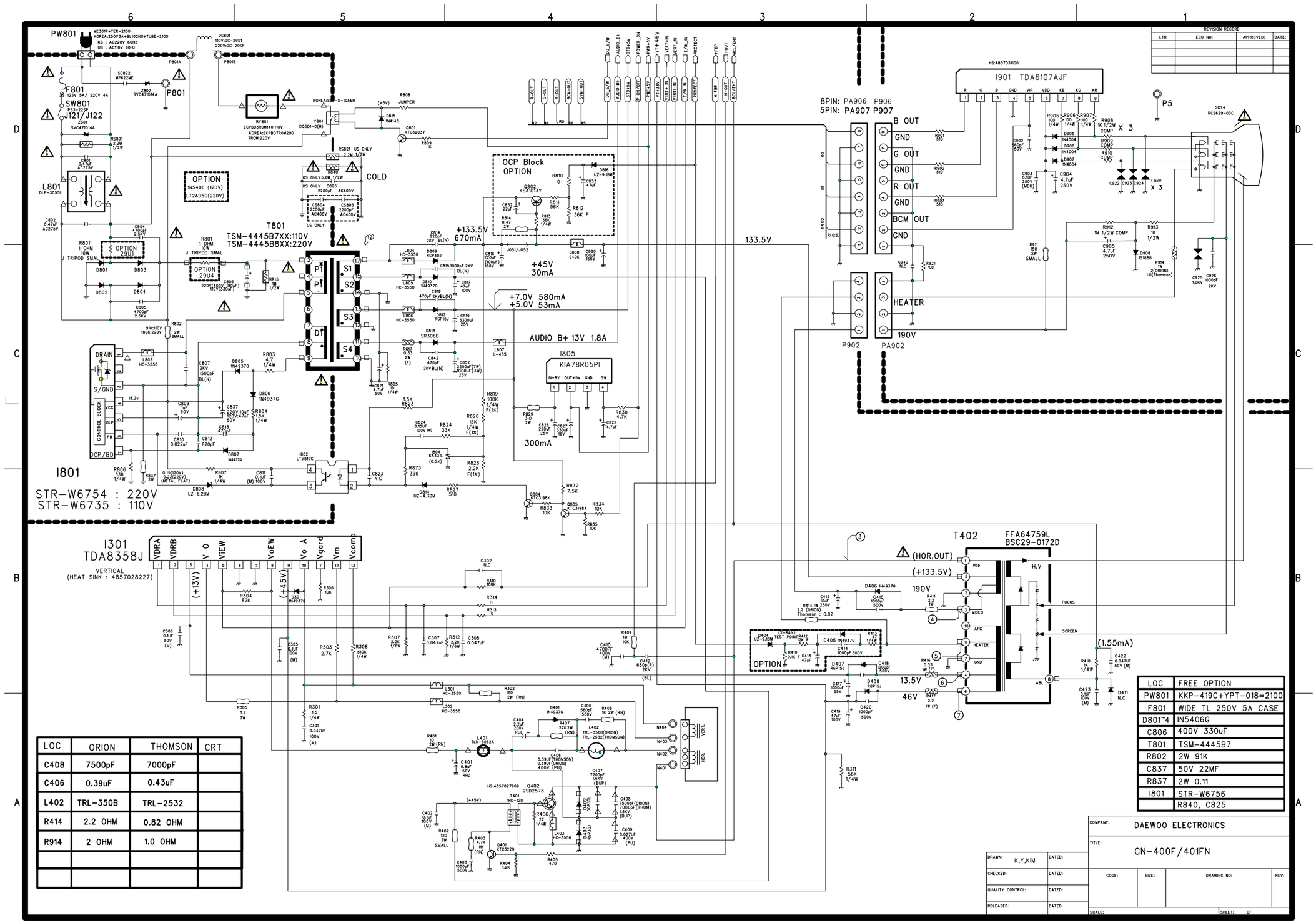
NO	LOC	PARTS CODE	PARTS NAME	PARTS DESCRIPTION
1	A001	4859819191	PCB MAIN	330X246 D1B
2	C118	CMXL1J154J	C MYLAR	63V MEU 0.15MF J
3	C415	CEXF2E100V	C ELECTRO	250V RSS 10MF (10X20) TP
4	C705	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z
5	C738	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
6	CA01	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
7	CA02	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
8	CA03	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
9	CA04	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
10	CA05	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
11	CA06	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
12	D807	D1N4937G--	DIODE	1N4937G (TAPPING)
13	DA01	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B
14	DA02	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B
15	DV01	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B
16	JP504	4859108450	JACK PIN BOARD	YSC03P-4120-14A
17	L705	5CPZ479K04	COIL PEAKING	4.7UH K (AXIAL 10.5MM)
18	M191	4851948700	BUTTON CTRL	4954900+5549100 29U4
19	M201	4852083400	MASK FRONT	FR HIPS GY 29U4
20	M211	4852163000	COVER BACK	FR HIPS GY 29U4
21	M481	4854864000	BUTTON POWER	FR HIPS GY 29U4
22	M561	48556174SD	MARK BRAND	SILVER DIA-CUTTING
23	P907	485923182S	CONN WAFER	YW025-05 (STICK)
24	PA601	4850704S41	CONNECTOR	YH025-04+YRT205+ULW=300
25	PA907	4850705S12	CONNECTOR	YH025-05+YST025+ULW=500
26	R119	RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
27	R407	RN02B223JS	R METAL FILM	2W 22K OHM J SMALL
28	R408	RN02B102JS	R METAL FILM	2W 1K OHM J SMALL
29	R612	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J
30	R829	RS02Z309JS	R M-OXIDE FILM	2W 3 OHM J SMALL
31	RA02	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J
32	RV03	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J
33	RV17	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
34	SW701	5S50101035	SW TACT	KPT-1112 1C-1P
35	SW707	5S50101090	SW TACT	THVH472GCA
36	Y801	5SC0101335	SW RELAY	DY2-5

SCHEMATIC DIAGRAM



Y/CR/CB_RL03 Y/CR/CB_RL04 Y/CR/CB_RL02 Y/CR/CB_RL05 Y/CR/CB_RL06 AV1/SVH03 AV1/SVH02 AV1/SVH01 AV1/SVH00 OUT0:23 OUT0 OUT1 OUT2 RGB/VM_OUT01 RGB/VM_OUT02RGB/VM_OUT03 RGB/VM_OUT04RGB/VM_OUT00:113 VA/VB/EW0 VA/VB/EW1VA/VB/EW2 RGB/VM_OUT05 Y/CR/CB_RL05 Y/CR/CB_RL03 Y/CR/CB_RL04 Y/CR/CB_RL01 Y/CR/CB_RL06 AV1/SVHE00:03) AV1/SVH03AV1/SVH02 AV1/SVH01 AV1/SVH00 Y/CR/CB_RL01:06) OUT0 OUT1 OUT2 VA/VB/EW0:43 VA/VB/EW0VA/VB/EW4 VA/VB/EW0 RGB/VM_OUT10RGB/VM_OUT06RGB/VM_OUT09RGB/VM_OUT08RGB/VM_OUT07

SCHEMATIC DIAGRAM



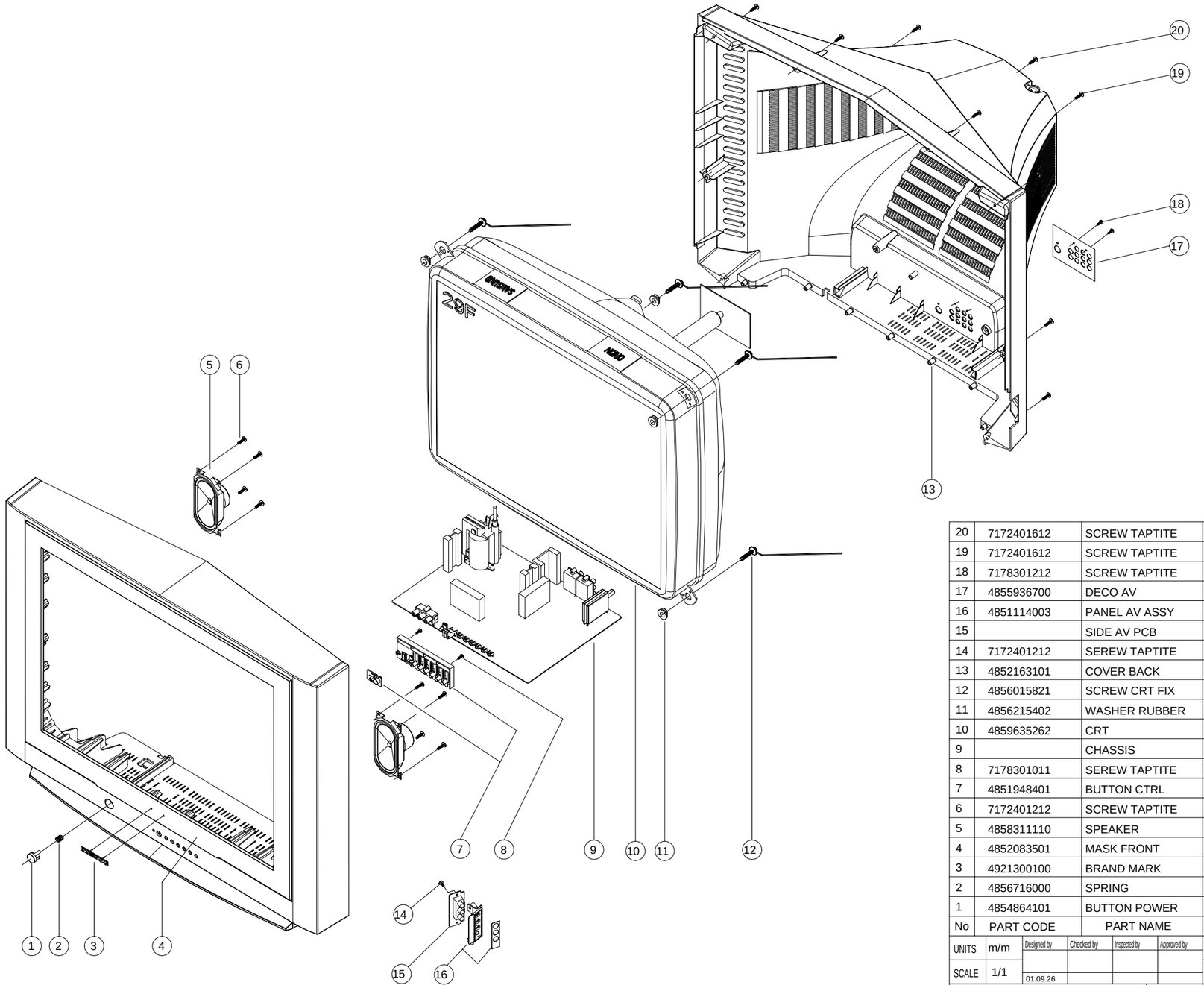
LOC	ORION	THOMSON	CRT
C408	7500pF	7000pF	
C406	0.39uF	0.43uF	
L402	TRL-350B	TRL-2532	
R414	2.2 OHM	0.82 OHM	
R914	2 OHM	1.0 OHM	

LOC	FREE OPTION
PW801	KKP-419C+YPT-018=2100
F801	WIDE TL 250V 5A CASE
D801~4	IN5406G
C806	400V 330uF
T801	TSM-4445B7
R802	2W 91K
C837	50V 22MF
R837	2W 0.11
I801	STR-W6756
	R840, C825

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

COMPANY:	DAEWOO ELECTRONICS		
TITLE:	CN-400F/401FN		
DRAWN: K,Y,KIM	DATED:	CODE:	SIZE: DRAWING NO: REV:
CHECKED:	DATED:		
QUALITY CONTROL:	DATED:		
RELEASED:	DATED:	SCALE:	SHEET: OF

EXPLODE VIEW



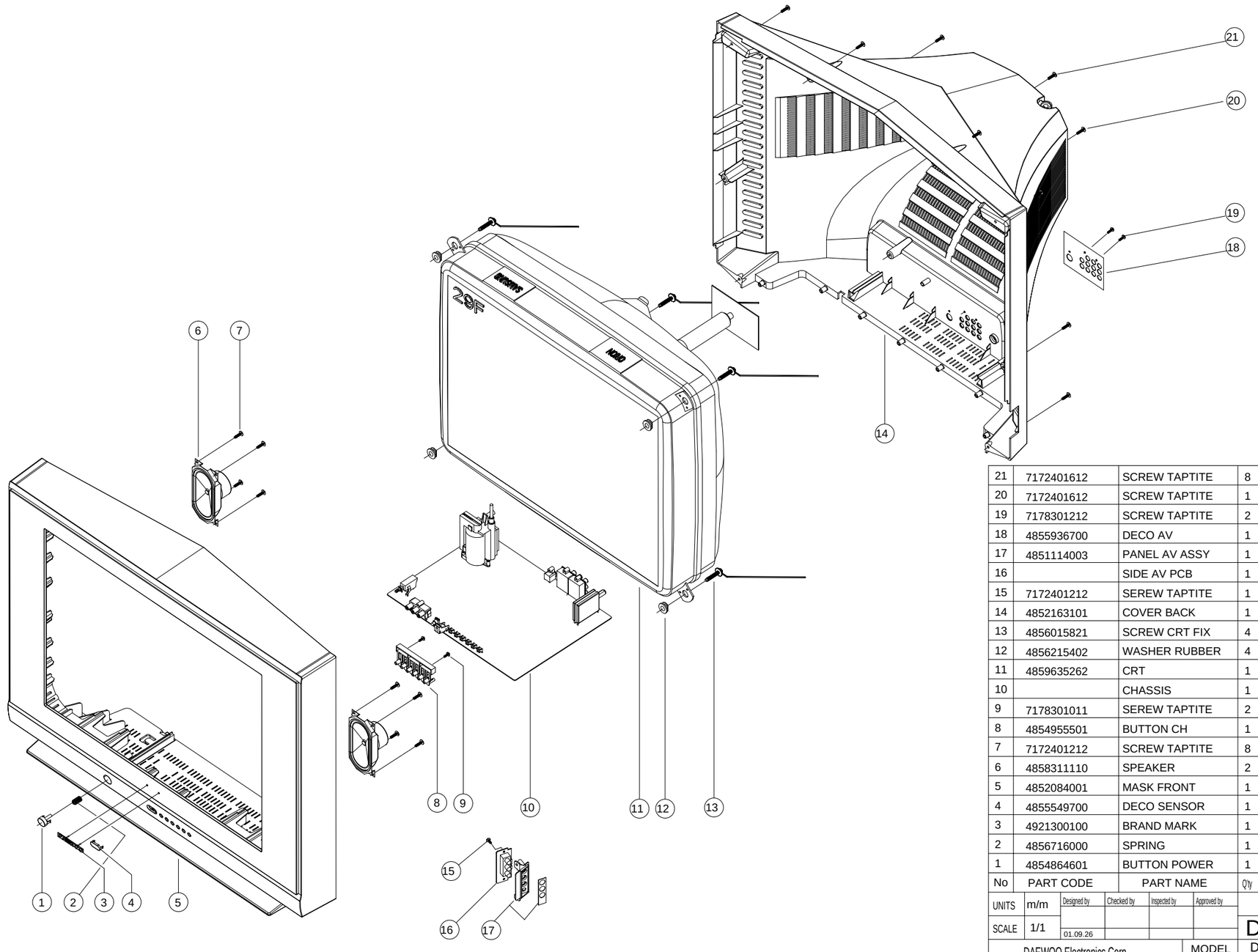
No	PART CODE	PART NAME	Q'ty	MATERIAL	REMARKS
20	7172401612	SCREW TAPTITE	8	TT2 TRS 4X16 MFZN BK	
19	7172401612	SCREW TAPTITE	1	TT2 TRS 4X16 MFZN BK	
18	7178301212	SCREW TAPTITE	2	TT2 WAS 3X12 MFZN BK	
17	4855936700	DECO AV	1	PVC T0.25	
16	4851114003	PANEL AV ASSY	1	2326802+5934301	
15		SIDE AV PCB	1	CN-321	
14	7172401212	SEREW TAPTITE	1	TT2 TRS 4X12 MFZN BK	
13	4852163101	COVER BACK	1	HIPS GY	
12	4856015821	SCREW CRT FIX	4	SWRM+SK5 L=35	
11	4856215402	WASHER RUBBER	4	CR T2.0	
10	4859635262	CRT	1	29"F	
9		CHASSIS	1	CN-793F	
8	7178301011	SEREW TAPTITE	2	TT2 WAS 3X10 MFZN	
7	4851948401	BUTTON CTRL	1	4955101+5549200	
6	7172401212	SCREW TAPTITE	8	TT2 TRS 4X12 MFZN BK	
5	4858311110	SPEAKER	2	12W 8 OHM SP-58126F	
4	4852083501	MASK FRONT	1	HIPS GY	
3	4921300100	BRAND MARK	1	A1	
2	4856716000	SPRING	1	SWPA PIE0.5	
1	4854864101	BUTTON POWER	1	HIPS GY	

UNITS	m/m	Designed by	Checked by	Inspected by	Approved by	PART NAME
SCALE	1/1	01.09.26				DEVELOPMENT DWG

DAEWOO Electronics Corp.
Mechanical Design Team, TV Research Center

MODEL	DTQ-29U1	D/N	485009KR
REFERENCE			

EXPLODE VIEW



No	PART CODE	PART NAME	Q'ty	MATERIAL	REMARKS
21	7172401612	SCREW TAPTITE	8	TT2 TRS 4X16 MFZN BK	
20	7172401612	SCREW TAPTITE	1	TT2 TRS 4X16 MFZN BK	
19	7178301212	SCREW TAPTITE	2	TT2 WAS 3X12 MFZN BK	
18	4855936700	DECO AV	1	PVC T0.25	
17	4851114003	PANEL AV ASSY	1	2326802+5934301	
16		SIDE AV PCB	1	CN-321	
15	7172401212	SEREW TAPTITE	1	TT2 TRS 4X12 MFZN BK	
14	4852163101	COVER BACK	1	HIPS GY	
13	4856015821	SCREW CRT FIX	4	SWRM+SK5 L=35	
12	4856215402	WASHER RUBBER	4	CR T2.0	
11	4859635262	CRT	1	29"F	
10		CHASSIS	1	CN-794F	
9	7178301011	SEREW TAPTITE	2	TT2 WAS 3X10 MFZN	
8	4854955501	BUTTON CH	1	ABS GY	
7	7172401212	SCREW TAPTITE	8	TT2 TRS 4X12 MFZN BK	
6	4858311110	SPEAKER	2	12W 8 OHM SP-58126F	
5	4852084001	MASK FRONT	1	HIPS GY	
4	4855549700	DECO SENSOR	1	PC SMOG	
3	4921300100	BRAND MARK	1	A1	
2	4856716000	SPRING	1	SWPA PIE0.5	
1	4854864601	BUTTON POWER	1	HIPS GY	

UNITS	m/m	Designed by	Checked by	Inspected by	Approved by	PART NAME
SCALE	1/1	01.09.26				DEVELOPMENT DWG

DAEWOO Electronics Corp.
Mechanical Design Team, TV Research Center

MODEL: DTQ-29U5
REFERENCE:
D/N: 485009KU

DAEWOO ELECTRONICS CORP.
686, AHYEON-DONG, MAPO-GU,
SEOUL, KOREA.
C.P.O. BOX 8003 SEOUL KOREA
PRINTED DATE : JUNE. 2005